United States Court of Appeals
for the
District of Columbia Circuit

TRANSCRIPT OF RECORD

FOR MR. CHIEF JUSTICE MARTIN

1934 Feby 12/13

Argued all present

TRANSCRIPT OF RECORD

Court of Appeals of the District of Columbia

APRIL TERM, 1933

No. 6035

423

EQUITABLE PAPER BAG CO., INC., APPELLANT,

vs.

CONWAY P. COE, COMMISSIONER OF PATENTS.

APPEAL FROM THE SUPREME COURT OF THE DISTRICT OF COLUMBIA.

FILED JULY 29, 1933.

PRINTED OCTOBER 16, 1933.

Court of Appeals of the District of Columbia

APRIL TERM, 1933

No. 6035

EQUITABLE PAPER BAG CO., INC., APPELLANT,

vs.

THOMAS E. ROBERTSON, COMMISSIONER OF PATENTS, APPELLEE.

APPEAL FROM THE SUPREME COURT OF THE DISTRICT OF COLUMBIA.

INDEX.

	Original	Print
Caption	*a*	1
Bill of complaint	1	1
Answer to the bill of complaint	6	6
Findings of fact	9	8
Conclusions of law	10	8
Final decree	10	9
Notice of appeal and waiver of citation; service of notice	11	9
Order fixing bond on appeal	11	10
Memoranda: $50 deposited for costs on appeal; statement of evidence filed	12	10
Assignments of error	12	10
Stipulation as to exhibits	15	12
Memorandum: Statement of evidence (1 copy) signed and made of record	15	13
Designation of record	16	13
Clerk's certificate	18	14
Statement of evidence	19	15
Testimony of George W. Poppe	21	15
Testimony of Maurice Rosenfeld	47	32
Addition to record by stipulation of counsel	50	34
Stipulation as to printing record	52a	36
Exhibits	53	37

JUDD & DETWEILER (INC.), PRINTERS, WASHINGTON, D. C., SEPTEMBER 5, 1933.

Court of Appeals of the District of Columbia

No. 6035

Equitable Paper Bag Co., Inc., Appellant,

vs.

Conway P. Coe, Commissioner of Patents.

---

a Supreme Court of the District of Columbia.

In Equity.

No. 53161.

Equitable Paper Bag Co., Inc., Plaintiff,

vs.

Thomas E. Robertson, Commissioner of Patents of the United States, Defendant.

United States of America,
District of Columbia, ss:

Be it remembered, That in the Supreme Court of the District of Columbia, at the City of Washington, in said District, at the times hereinafter mentioned, the following papers were filed and proceedings had in the above-entitled cause, to wit:

1 *Bill of Complaint.*

To Compel Issuance of Letters Patent.

Filed Jul. 21, 1931.

In the Supreme Court, District of Columbia.

In Equity.

No. 53161.

Equitable Paper Bag Co., Inc., Plaintiff,

vs.

Thomas E. Robertson, Commissioner of Patents of the United States, Defendant.

To the Honorable Judges of the Supreme Court of the District of Columbia:

Now comes plaintiff, Equitable Paper Bag Co., Inc., and brings this, its bill of complaint, against Thomas E. Robertson, as he is Commissioner of Patents of the United States and complains and says:

1. Plaintiff is a corporation organized and existing under the laws of the State of New York and having its principal place of business at 314 Scholes Street, Brooklyn, County of Kings, State of New York. Defendant, Thomas E. Robertson, is Commissioner of Patents of the United States, having his official residence in the District of Columbia.

2. This is a bill brought under and pursuant to provisions of the Revised Statutes of the United States, Section 4915.

3. On information and belief, George W. Poppe, a citizen
of the United States and then resident of Brooklyn, County
of Kings and State of New York was, on and prior to
March 14, 1930, the original, first and sole inventor
2 of certain new and useful improvements in paper
bags, not known or used by others in this country
before his invention or discovery thereof; and not patented
or described in any printed publication before his invention
or discovery thereof or more than two years prior to his
hereinafter-mentioned application for Letters Patent there-

for and not in public use or on sale in the United States for more than two years prior to said application and not abandoned and not first patented or caused to be patented by the inventor or his legal representatives or assignees in any foreign country on an application filed more than twelve months prior to the filing of his hereinafter-mentioned application in this country. On the 11th day of March, 1930, said George W. Poppe signed an application for United States Letters Patent for said invention "Paper Bags" and on the 14th day of March, 1930, said application was filed in the Patent Office according to law with the Commissioner of Patents, said application being serially numbered 435,844. The Plaintiff hereby makes profert of a certified copy of said application as filed.

4. On the 11th day of March, 1930, said George W. Poppe, executed, acknowledged and delivered to Plaintiff an assignment in writing of the entire right, title and interest in, to and under the said invention, the said application for United States Letters Patent including all priority rights arising therefrom and any and all Letters Patent of the United States and of all other countries which might be granted for said invention; and by said assignment George W. Poppe authorized and requested the Commissioner of Patents to issue United States Letters Patent for said invention to the Plaintiff as assignee. Said assignment was
recorded in the United States Patent Office March
3 14, 1930, in Liber D143, Pages 270, 271, 272. Plaintiff hereby makes profert of said assignment.

5. On information and belief George W. Poppe in his said application particularly pointed out and distinctly claimed the part, improvement or combination which he claims as his invention in and by five claims, each of which Plaintiff believes states subject matter of patentable invention of which George W. Poppe is the first, sole and original inventor and which is and at all times has been patentable to said George W. Poppe.

6. At the time of filing on March 14, 1930, in accordance with the Rules and Regulations of the Patent Office, a petition was filed asking that the said application of George W. Poppe be made special in view of facts set forth in an affidavit of George M. Dowe, a member of the firm of Newell & Spencer, attorneys for George W. Poppe and his assignee, the Plaintiff herein, said affidavit setting forth that a paper bag manufactured by a third party had been shown to depo-

nent by an officer of the Plaintiff Company which would, in the opinion of said deponent, unquestionably infringe claims originally presented in said application. A profert of said petition and said affidavit is hereby made by Plaintiff.

7. The primary examiner of the Patent Office in charge of the said application rejected all of said five original claims; thereafter other and further proceedings were had in accordance with law and the Rules and Regulations of the Patent Office, including substitute claims and additional claims, each of which states subject matter of patentable invention of which George W. Poppe is the first, sole and original inventor as hereinbefore alleged and each
4 of which has at all times been patentable to said
Poppe. Said additional and substitute claims were also rejected and refused by the primary examiner in charge of said application. The Plaintiff hereby makes profert of said amendments.

8. After the final rejection of each and all of claims 6 to 15 standing in the case April 29, 1930, Plaintiff thereupon, in accordance with the law and Rules and Regulations of the Patent Office, appealed to the Board of Appeals of the United States Patent Office assigning error by the primary examiner in rejecting the said claims and after hearing the said appeal, the Board of Appeals in a decision dated May 29, 1931, affirmed the said rejection and decision of the primary examiner.

9. Plaintiff did not appeal from said decision of the Board of Appeals to the Court of Customs and Patent Appeals, but has elected and does elect to proceed under Revised Statutes, Section 4915.

10. Plaintiff avers that the Commissioner of Patents has refused and still refuses to grant Letters Patent for the inventions defined in the claims now in the case, although the Plaintiff is lawfully entitled thereto as exclusive owner of all right, title and interest therein.

11. Plaintiff further avers that the inventions set forth and defined by said claims are of great commercial value and have gone into extensive use, more than two hundred million paper bags embodying the invention having been produced and sold.

12. Plaintiff further avers that the inventions set forth and defined by said claims were and are patentable and that

the Board of Appeals erred in their judgment and
5 the Plaintiff prays this Honorable Court to adjudge that the Plaintiff is entitled according to law to secure a patent for the said inventions as specified in said claims or for any part thereof as the facts in the case may appear and prays for such other and further relief as may appear to this Court to be just.

13. And the Plaintiff prays that a *subpœna ad respondendum* directed to the Hon. Thomas E. Robertson as he is Commissioner of Patents of the United States, be issued out of and under the seal of this Honorable Court, requiring him to appear and answer unto this bill of complaint, and to do and to receive whatsoever this Court may order in the premises.

EQUITABLE PAPER BAG CO., INC.,
By MAURICE ROSENFELD, *Pres.*

STATE OF NEW YORK,
County of New York, ss:

On this 15th day of July, 1931, personally appeared before me Maurice Rosenfeld, personally known to me, and made oath he is the President of Equitable Paper Bag Co. Inc., the Plaintiff named in the foregoing bill of complaint; that he has read the same and knows the contents thereof and that the statements therein contained are true of his own knowledge except in so far as they have been stated on information and belief, and that as to those he believes them to be true.

[NOTARIAL SEAL.] HELEN C. SWEENEY,
Notary Public, Bronx County.

Bronx Co. Cl'k's No. 225.
N. Y. Co. Cl'k's No. 215.
Commission expires March 30, 1933.

6 NEWELL & SPENCER,
Attorneys for Plaintiff.
CUSHMAN, BRYANT, DARBY & CUSHMAN,
Solicitors for Plaintiff,
By ARLON V. CUSHMAN.

Service acknowledged the 20th day of July, 1931.

——— ———,
Counsel for Thomas E. Robertson,
Commissioner of Patents.

Answer to the Bill of Complaint.

Filed Aug. 5, 1931.

* * * * * * *

To the Honorable the Judges of the Supreme Court of the District of Columbia:

Thomas E. Robertson, Commissioner of Patents, defendant herein, in answer to the Bill of Complaint alleges on information and belief as follows:

1. He admits for the purpose of this suit the allegations of paragraph 1.

2. He admits jurisdiction under Section 4915 R. S. (35 U. S. C. A. 63).

3. He admits that George W. Poppe on the 11th day of March, 1930, filed an application for letters patent for Paper Bags, to which Serial No. 435,844 was given, but denies that the claims for which plaintiff contends in said application are patentable to them.

4. He admits for the purpose of this suit the allegations of paragraph 4.

5. He admits that plaintiff presented five claims in said application, but denies that said claims are patentable to plaintiff in view of the following prior patents, cited
7 in the decision of the Board of Appeals, viz:

McCoy, 599,858, Mar. 1, 1898.
Sullivan, 1,279,171, Sep. 17, 1918.
Hogan, 1,359,063, Nov. 16, 1920.
Driver, 1,661,884, Mar. 6, 1928.
Haseltine (British), 1,622, May 5, 1873.
Vanderlip (British), 9,156, Apr. 18, 1906.

Profert of copies of said patents is hereby made.

6. He admits the allegations of paragraph 6.

7. He admits that the primary examiner rejected the claims as specified, but denies that said claims are patentable to plaintiff.

8. He admits for the purpose of this suit the allegations of paragraph 8.

9. He admits for the purpose of this suit the allegations of paragraph 9.

10. He admits that he has refused and still refuses to grant letters patent to plaintiff for the invention defined

in the claims and denies that plaintiff is lawfully entitled thereto.

11. Defendant has no knowledge of the allegations of paragraph 11 except as informed by the bill, but states that the large sales alleged do not indicate that the claims are patentable.

12. Defendant denies that the claims set forth in plaintiff's application are patentable in view of the prior patents cited, as more fully appears from the statement of the examiner and the decision of the Board of Appeals; profert of copies is hereby made.

13. Defendant herein answers and is ready to appear by counsel.

Further answering, defendant denies each and every allegation of the Bill of Complaint not herein specifically
8 admitted or denied and prays that plaintiff's Bill
of Complaint be dismissed.

Wherefore defendant having fully answered the Bill of Complaint denies that the plaintiff is entitled to the relief demanded or any part thereof and prays that he be hence dismissed with all costs and expenses of the proceedings against plaintiff as provided by Section 4915 R. S.

THOMAS E. ROBERTSON,
Commissioner of Patents, Defendant.

T. A. HOSTETLER,
Solicitor U. S. Patent Office,
Attorney for Defendant.

DISTRICT OF COLUMBIA,
City of Washington, ss:

I, Thomas E. Robertson, Commissioner of Patents, depose and say that I have read the above answer by me subscribed and know the contents thereof, and that the statements of facts therein made as upon personal knowledge are true, and those made upon information and belief I believe to be true.

THOMAS E. ROBERTSON,
Commissioner of Patents.

Subscribed and sworn to before me this 4th day of August, 1931.

[NOTARIAL SEAL.] ALBERT W. KAISER,
Notary Public, D. C.

9

Findings of Fact.

Filed Apr. 10, 1933.

* * * * * * *

1. Plaintiff's application discloses a bag, which is machine made from a tube, having a front wall and a rear wall, a bottom flap formed as a prolongation of the front wall folded over the rear wall, and a closing flap formed as a prolongation of the rear wall foldable over the front wall.

2. The Sullivan patent No. 1,279,171, and the Haseltine No. 1622 British 1873 patent each discloses bags formed from tubes.

3. The Hogan patent No. 1,359,063 discloses an envelop formed from a blank and having a bottom flap formed as a prolongation of the front wall and folded over the rear wall and a closing flap formed as a continuation of the rear wall and foldable over the front wall. This patent discloses additional closing means to which the single claim is directed.

4. The Vandelip No. 9156 British 1906 patent discloses a bag made from a blank in which the bottom flap is a prolongation of the front wall and is folded over the rea*l* wall and the closing flap is a prolongation of the rear wall and is foldable over the front wall. This patent also discloses additional closing means to which the single claim is directed.

5. Serrated edges on certain parts of the bags are shown by McCoy No. 599,858, by Sullivan No. 1,279,171, and by Driver No. 1,661,884, and by Haseltine (British) No. 1622, of 1873.

10

Conclusions of Law.

1. The claims are unpatentable over the disclosures of the prior patents adduced by defendant.

2. The patent to Vanderlip (British), No. 9156 of 1906, discloses substantially the structure defined by the claims, set forth in the Examiner's Statement.

3. Claims 6 to 10, inclusive, and claim 15, as article claims, do not distinguish patentably from the prior art of record by the limitations "machine made from a bag tube"

and similar language and to that extent are article claims defined by the method of making the bag.

4. The claims are refused plaintiff on the grounds given in the Examiner's Statement and in the decision of the Board of Appeals.

5. The Bill will be dismissed.

F. D. LETTS,
Justice.

April 10th, 1933.

Final Decree.

Filed Apr. 10, 1933.

* * * * * * *

This cause having come on to be heard and having been tried in open court and argued by counsel for the respective parties upon the pleadings and proofs adduced and submitted to the Court,

It is adjudged, ordered and decreed this 10th day of April, 1933, that the Bill of Complaint in this case be, and the same hereby is dismissed with costs against the plaintiff.

F. D. LETTS,
Justice.

Approved as to form.
NEWELL & SPENCER,
Attorneys for Plaintiff.

11 *Notice of Appeal and Waiver of Citation.*

Filed Apr. 22, 1933.

* * * * * * *

Now comes the Plaintiff by his attorneys, Newell & Spencer, and feeling himself aggrieved by the final decree of this court entered on the tenth day of April, 1933 hereby gives notice of appeal from said decree to the Court of Appeals of the District of Columbia.

NEWELL & SPENCER,
Attorneys for Plaintiff.
ARLON V. CUSHMAN,
By CUSHMAN, DARBY & CUSHMAN,
Solicitors for Plaintiff.

Dated this 22nd day of April, 1933.

Service of a copy of this notice is hereby acknowledged this 22nd day of April, 1933. Citation is hereby waived.

T. A. HOSTETLER,
Solicitor for the Commissioner of Patents.

Order Fixing Bond on Appeal.

Filed Apr. 22, 1933.

* * * * * * *

It appearing to the Court that the Plaintiffs have noted an appeal herein from the decree of April 10th, 1933, it is this 22nd day of April, 1933 ordered:

That the bond on appeal be, and the same hereby is fixed in the sum of One Hundred Dollars ($100.00) or, in lieu thereof, deposit with the clerk the sum of Fifty Dollars ($50.00) in cash.

ALFRED A. WHEAT,
Chief Justice.

12 *Memoranda.*

April 22, 1933.—$50 deposited for costs on appeal.
May 2, 1933.—Statement of Evidence filed.

Assignments of Error.

Filed May 2, 1933.

* * * * * * *

Now comes the plaintiff in the above-entitled case and files the following assignments of error upon which it will rely upon the prosecution of its appeal from the decree of the Supreme Court of the District of Columbia entered on the 10th day of April, 1933.

The Court erred:

1. In dismissing the bill of complaint.
2. In not granting the prayer of the bill.
3. In holding that the claims of the Poppe application, Serial No. 535,844, are unpatentable over the disclosures of the prior art patents.
4. In holding that the British patent to Vanderlip, No. 9156 of 1906, discloses substantially the structure defined by the claims of the Poppe application here in suit.
5. In holding that claims 6 to 10 inclusive and claim 15 as article claims do not distinguish patentably from the prior art of record by the limitations "machine made from a bag tube." 13

6. In holding that the limitation "machine made from a bag tube" and similar language constitute article claims defined by the method of making the bag.

7. In refusing the plaintiff's claims on the grounds given in the Examiner's statement and in the decision of the Board of Appeals of the Patent Office.

8. In not finding as a matter of fact that the subject matter as defined in the claims of the Poppe application is new over any disclosure of any prior art of record.

9. In not finding that the prior art shows no bag envelope having the characteristics of the Poppe bag envelope of this suit.

10. In failing to give weight to the immediate and widespread acceptance in the commercial field of the bag envelope disclosed in the Poppe application.

11. In not finding that the British patent to Vanderlip is an envelope produced from a blank and not from a bag tube.

12. In not finding that Poppe is the first to produce a bag envelope made from a bag tube by bag machinery, which bag envelope has a long closing flap similar to that of an envelope.

13. In not finding that the British patent to Haseltine, No. 1622 of 1873, is a bellows bag known to the art for more than fifty years and having a thumb hold by which it may be opened but which thumb hold is in no sense a closing flap nor suggestive in any way of the bag envelope of
14 the Poppe application.

14. In not finding that the United States patents to Driver and McCoy are merely flat grocery bags similar to plaintiff's Exhibit 4.

15. In not finding that the United States patent to Sullivan is merely a Haseltine bag having special features.

16. In not finding as a matter of fact that no art of record suggests the possibility of forming a closing flap having machine-cut side edges of substantial length in a bag made from a bag tube.

17. In giving any weight to the Patent Office argument of "no invention", in view of the admitted newness of the article by the primary Examiner and in view of the repeated holding by the Court of Appeals of the District of Columbia that any doubt as to patentability should be resolved in favor of the applicant.

18. In not finding that the phrase "machine made from a bag tube" which appears in a number of the claims of the Poppe application is a description of structure characteristic of bags as distinct from envelopes and in no way describes the process by which the particular bag is made.

19. In failing to give weight to the fact that the bag envelope of the Poppe application can be made by different processes, one of which is described in the Poppe patent No. 1,798,168, plaintiff's Exhibit 2 and another of which is described in the Poppe patent 1,851,060, plaintiff's Exhibit 13.

15 Wherefore plaintiff prays that the said decree may be reversed.

NEWELL & SPENCER,
Attorneys for Plaintiff.
ARLON V. CUSHMAN,
By CUSHMAN, DARBY & CUSHMAN,
Solicitors for Plaintiff.

GEO. M. DOWE,
Of Counsel.

Dated April 25, 1933, New York, New York.

Stipulation.

Filed May 10, 1933.

* * * * * * *

It is hereby stipulated and agreed, between counsel for the parties in the above entitled cause, that the exhibits (Nos. 1, 2, 3, 4, 5, 5a, 6 to 24, inclusive) introduced in evidence on trial in the Supreme Court of the District of Columbia be, and hereby are, made a part of the Statement of Evidence to be attached thereto and transmitted to the Court of Appeals of the District of Columbia with the Transcript of Record on appeal.

NEWELL & SPENCER,
Attorneys for Plaintiff.
ARLON V. CUSHMAN,
CUSHMAN, DARBY & CUSHMAN,
Solicitors for Plaintiff.
T. A. HOSTETLER,
Solicitor for Defendant.

GEORGE M. DOWE,
Of Counsel.

Memorandum.

July 26, 1933.—Statement of Evidence (1 copy) signed and made of record.

16 *Designation of Record.*

Filed May 10, 1933.

* * * * * * *

Now comes Equitable Paper Bag Company, Inc., the appellant in the above entitled cause and designates the parts of the record which it desires to have included in the transcript, said parts being considered sufficient for the determination of the questions raised on appeal, namely:

1. Bill of Complaint.
2. Answer.
3. Findings of fact and conclusions of law in the Supreme Court of the District of Columbia.
4. Decree of April 10, 1933.
5. Notice of Appeal and Waiver of Citation.
6. Order fixing bond (or cash deposit in lieu thereof).
7. Memorandum of deposit of $50.00 in lieu of undertaking on appeal.
8. Statement of Evidence.
9. The following exhibits: Plaintiff's exhibits Nos. 1, 2, 3, 4, 5, 5a, 6 to 24, inclusive, said exhibits being attached to and made a part of the Statement of Evidence.
10. Assignments of Error.
11. This designation.

NEWELL & SPENCER,
Attorneys for Plaintiff-Appellant.
ARLON V. CUSHMAN,
By CUSHMAN, DARBY & CUSHMAN,
Solicitors for Plaintiff-Appellant.

GEORGE M. DOWE,
Of Counsel.

Dated May 10, 1933, Washington, D. C.

17 Service of a copy of this designation is acknowledged this 10th day of May, 1933.

T. A. HOSTETLER,
Solicitor for Defendant-Appellee.

18 Supreme Court of the District of Columbia.

UNITED STATES OF AMERICA,
District of Columbia, ss:

I, Frank E. Cunningham, Clerk of the Supreme Court of the District of Columbia, hereby certify the foregoing pages, numbered from 1 to 17, both inclusive, to be a true and correct transcript of the record, according to directions of counsel herein filed, copy of which is made part of this transcript, in cause No. 53161, in Equity, wherein Equitable Paper Bag Co. Inc. is Plaintiff and Thomas E. Robertson, Commissioner of Patents of the United States, is Defendant, as the same remains upon the files and of record in said Court.

In testimony whereof I hereunto subscribe my name and affix the seal of said Court, at the City of Washington, in said District, this 29th day of July, 1933.

[Seal Supreme Court of the District of Columbia.]

FRANK E. CUNNINGHAM,
Clerk,
By CHAS. B. COFLIN,
Asst. Clerk.

19 Filed May 2, 1933.

In the Supreme Court of the District of Columbia, Holding an Equity Court.

Equity. No. 53161.

EQUITABLE PAPER BAG COMPANY, INC., Plaintiff,

vs.

THOMAS E. ROBERTSON, Commissioner of Patents, Defendant.

Washington, D. C., January 18, 1933.

Appearances:

For the Plaintiff: George M. Dowe, Esq. (Messrs. Newell & Spencer, Room 2404 Graybar Building), 420 Lexington Avenue, New York, N. Y.

For the Defendant: T. A. Hostetler, Esq., Solicitor, U. S. Patent Office.

Statement of Evidence.

Mr. Dowe offered in evidence on behalf of the plaintiff a certified copy of the file wrapper and contents of the application of George W. Poppe, Serial No. 435,844, filed March 14, 1930, and the same is marked Plaintiff's Exhibit No. 1, which application is a division of an earlier filed application which has matured into a patent. This patent, No. 1,798,168, dated November 1, 1928, is offered in evidence and is marked Plaintiff's Exhibit No. 2.

20 Mr. Hostetler, on behalf of the Defendant, offered in evidence a bound volume of exhibits designated as follows:

Exhibit A is a patent to McCoy, 599,858.

Exhibit B, patent to Sullivan, 1,279,171.

Exhibit C, patent to Hogan, No. 1,359,063.

Exhibit E, patent to Haseltine, British No. 1622 of 1873.

Exhibit F, Vanderlip, British No. 9156, of 1906.

As Exhibit G, Prints of the drawings, that is the drawings of plaintiff's machine.

Exhibit H, the Examiner's statement.

And Exhibit I, decision of the Board of Appeals.

21 **George W. Poppe**, called as a witness on behalf of plaintiff, testified as follows under direct examination of Mr. Dowe:

I am superintendent for the Equitable Paper Bag Company, the plaintiff herein and my duties are to take charge of the manufacturing and supervision of the repair and maintenance of equipment for the manufacture of paper bags and envelopes and to design and build new equipment. I have been connected with the manufacture of paper bags for twelve years and have been building equipment for three or four years. I have been superintendent of the Equitable Paper Bag Company twelve years.

I am the George W. Poppe whose application for patent is the issue of this suit.

Q. Mr. Poppe, I hand you some articles and ask you if you will identify each one, starting with this (indicating). A. This here is an ordinary center seam open end envelope, produced on an envelope machine.

The envelope is offered in evidence and marked plaintiff's Exhibit 3.

By Mr. Dowe:

Q. Take this next (indicating). A. This here (indicating) is an ordinary flat grocery bag, which is manufactured on what is known as a flat and square grocery bag machine.

Mr. Dowe: I offer this in evidence as Plaintiff's Exhibit No. 4.

(The bag referred to was thereupon received in evidence and marked "Plaintiff's Exhibit No. 4.")

22 The Witness: And this one here?

By Mr. Dowe:

Q. The next, yes. A. This here is a bag of my invention, and is known as an envelope flap bag, and is manufactured on an ordinary bag machine. This is a bag of my invention (indicating).

Mr. Dowe: The bag identified by the witness is offered in evidence as Plaintiff's Exhibit No. 5.

(The bag referred to was thereupon received in evidence and marked "Plaintiff's Exhibit No. 5.")

The Witness: And this bag here is also the bag of my invention (indicating), known as a square flap, and is also manufactured on an ordinary bag machine.

Mr. Dowe: The bag last identified by the witness is offered in evidence as Plaintiff's Exhibit 5-A.

(The bag referred to was thereupon received in evidence and marked "Plaintiff's Exhibit No. 5-A.")

Each of these Exhibits 3, 4, 5 and 5-A were made under my supervision. The features which distinguish the bag envelope of my invention identified by Exhibits 5 and 5-A differ from an ordinary envelope and from an ordinary paper bag in that the bag envelope of my invention is made on an ordinary bag machine and is made without waste, the flap of one bag fitting perfectly into the bottom of the other bag. Due to the fact that the flap of Exhibit 5 is cut at an angle, gussets are produced in the bag bottom which makes four thicknesses of paper at the bottom when it is folded over.

23 Q. Now, Mr. Poppe, will you explain to the Court how waste occurs and must necessarily occur in the

making of an envelope. I will say, Mr. Poppe, put on the record what you are producing and say what that is.

The witness produces two envelope blanks opened up to demonstrate how they are made.

The Witness, continuing: An envelope is distinguished from a bag by the people in the trade by the fact that the closing flap folds over on the back of the envelope leaving a clean face on the front for printing. In order to make a flap which will fold over in this manner it is necessary to produce waste. In a bag the paper is first folded and then cut. In an envelope the paper is first cut and then folded. In an envelope there is only one thickness of paper at the bottom. In the bag of my invention there are four thicknesses.

The envelope blanks produce by the witness are offered in evidence and marked Plaintiff's Exhibit No. 6.

The Witness, continuing: The bag envelopes of my invention are produced at speeds varying from two hundred to four hundred a minute. The record of each day's work done on a machine is recorded on production slips which are filled out by the operator who runs the machine. I produce two such production slips, one of which shows the production of 200,000 bags a day and the other of which shows a production of 170,000 bags a day. With a production of 200,000 bags a day this means the machine is run
at four hundred a minute. I would say that from
24 160,000 to 200,000 bags was a fair average day's run.

The production slips produced by the witness are offered in evidence and marked Plaintiff's Exhibit 7.

Witness, continuing: These production slips, Plaintiff's Exhibit 7, were made in my department and under my supervision. It is a part of our regular routine.

Q. Mr. Poppe, what is the cost of a bag machine as compared with an envelope machine? A. Now, what is known as a flat and square grocery bag machine costs from $1,800 to $2,600, according to size and generally four machines in a set, to make from the smallest bag to the largest. And they range from $1,800 to $2,600, according to size.

Q. How about an envelope machine? A. Well, you take an envelope machine, why they range from $5,000 to $7,000, according to size. There is about four or five in a set.

The machines producing small bags cost about $5,000, and the larger envelope machines would cost around $7,000.

Q. Now, you have shown the waste by your reference to Exhibit 6. Will you state what is the actual saving in paper length in the bag of the size, say, of Exhibit 5, as compared with an envelope of the same size? A. Well, there really is a difference, to be absolutely accurate. There is a difference of 1⅝ on every bag envelope that is produced. We save 1⅝ inches of paper.

Q. Now, can you illustrate to the court how the ordinary paper bag is made? A. Yes.

Q. Will you do so?

The witness produces a model and proceeds to demonstrate the making of an ordinary paper bag.

Q. Now make another bag. I want to show how the two bags fit together.

Witness makes another bag.

Q. Now will you put the two bags together and show how the top of one fits into the bottom of the other. A. (Witness does so.) That is why there is no waste.

Q. Now, Mr. Poppe, if you folded up the bottom of this bag would you have a bag similar to Exhibit 4? A. Exhibit 4 is what? Yes, sir, you would have a bag similar to Exhibit 4. The bottom would be folded like that (indicating).

Q. Now, can you make the bag of your invention on that machine? A. Yes, sir.

Witness proceeds to do so.

Q. Mr. Poppe, is that tube the same kind of tube you used before? A. No. This is a different tube.

Q. How does it differ? A. This tube here has angular slits at predetermined intervals produced in the web with dies.

Q. And what is the purpose of those slits? A. Well, the purpose of those slits is so we can make a long flap.

26 Q. Now, are you limited to the particular length of flap in the making of your bag? A. No; we are not limited in the length of flap.

Q. What is that you are producing? A. This here is the same as the envelope flap bag, but I am merely making the flap larger, or we merely make it larger. We call this a packeting bag. These flaps, we make them up to 5¼ or 5½ inches long, and they are folded in over the merchandise, that is inside of the bag they are folded in over the merchandise.

The model used by the witness is offered in evidence and marked Plaintiff's Exhibit 8.

The packeting bag described by the witness is offered in evidence and marked Plaintiff's Exhibit 9.

The Witness, continuing: The packeting bag, Exhibit 9, is produced in regular production on an ordinary bag machine the same as grocery bags and a small envelope flap bag.

Q. Have you any idea what an envelope machine would cost to make a bag of the sort such as Exhibit 9? A. We had an inquiry for an envelope with a five inch flap a few months ago, and Mr. Rosenfeld, president of the Equitable Paper Bag Company sent me over to the Smythe Envelope Machine Company, Twelfth Avenue and Forty-fourth Street, New York, to find out what a machine would cost to make an envelope with a five inch flap, and Mr. Novak, their chief engineer, told me they had no stock machines that would do anything like that, but they could build one for us, and it would cost $15,000 to make an envelope machine that would produce a five inch flap.

27 Q. Now, Mr. Poppe, will you state some of the circumstances leading up to the production of your bag envelope, the subject of this suit? A. Well, what really started me working on it, was the demand in the trade, and inquiries, that is what really started me working on it, they wanted a flap, rather, they wanted a bag which would resemble an envelope, especially the flap, which when folded over covers the corners of the top of the bag properly, because in the ordinary bag it is not meant to be folded over, and there is merely a thumb hold when folded over, and it does not cover it at all. And the trade wanted, as I say, a product resembling an envelope, and especially the

flap, and when it was folded over it would cover the corners properly.

Q. Did you experiment extensively before arriving at this particular form of bag? A. Why, yes, sir, I did experiment for a year or so trying to do that.

Q. Can you give us some of the hardships that you encountered? A. Yes, sir, I can.

Q. I only want those three (indicating knives). Keep those separate. Now, tell the Court what you have there. A. These are three serrated edged knives, corresponding with this small knife here (indicating). They go just where this upper knife goes.

By the Court:

Q. That is what you called the lip knife? A. The lip knife, yes, sir. And I tried to produce a large flap with these knives here. I have all kinds of shapes here. 28 And I bent them concave and convex, and every conceivable manner, trying to produce a large flap without splitting the sides, as I do in the bag of my invention, and I could not produce a large flap in this manner. Now, we did run off a few small orders, but the waste was so great, I would say around 10 to 15 per cent, with imperfect flaps, because they were not slit on the side, and the flaps instead of cutting off properly, they busted off, they tore, and due to the large percentage of waste I had to give it up.

Q. At this moment let me interrupt. You say you had about ten to fifteen per cent of waste. What waste do you have on running your bags now? A. I don't waste any more. I had imperfect flaps, and I had bad cut-offs.

Q. What per cent of waste do you get now? A. Really we don't get any; one half of one per cent, which is allowed in the trade on bags. We get less than that.

Q. You get less than one-half of one per cent waste? A. Yes, we do. In other words, we get less than one-half of one per cent waste.

The three lip knives produced by the witness are offered in evidence and marked Plaintiff's Exhibits 10, 11, and 12 respectively.

By Mr. Dowe:

Q. As I understand it, then, it is essential that you either first cut the web, or cut the tube to make smooth side edges

to the lip in order to get a successful bag of this
29 type? A. Yes, sir. You have either got to cut it in
the web, or cut it in the tube in order to have the smooth sides to the flap.

Q. In other words, when you were experimenting with these lip knives you were following the teachings of the prior art in using a knife to cut both sides and top edge of the flap? A. That is the ordinary method you mean in the prior art?

Q. Yes. A. Yes, sir.

Q. So then your real change was to cut the sides of the flap? A. In the web.

Q. In the web or in the tube? A. Or in the tube.

Q. And then make your invention with smooth side edges and serrate the top edge? A. Right.

Q. Now, in your patent Exhibit 2, you have shown one method of producing this bag of your invention. Could that bag be produced by other methods than described in that patent? A. Yes, it could be produced by other methods.

Q. Have you actually produced it? A. Yes, I have produced it by other methods, both in the slitting in the web and slitting in the tube, both methods.

Q. Now, what have you there? A. This here is
30 slitting in the tube.

Q. Now, what is that? A. This is my Patent No. 1,851,060. That is a process of the machine for making bags.

Q. And that covers the process of slitting the tube? A. Yes, sir.

Q. While your patent Exhibit 2 covers the process—— A. (Interposing.) Slitting in the tube.

Q. Slitting in the tube? A. Yes, sir.

The Poppe patent 1,851,060 is offered in evidence and is marked Plaintiff's Exhibit 13.

By Mr. Dowe:

Q. Now, I hand you Exhibit 5A again, Mr. Poppe, and ask you how that bag was made? A. Exhibit 5A was made on an ordinary grocery bag machine, and the edges were slit in the tube.

Q. In other words, you used the process of your patent No. 1,851,060 in producing that bag? A. Yes, sir.

Q. Could you also produce that identical type bag by the process shown in your patent Exhibit 2? A. Yes, sir. This bag can be made in that manner also, that is, the slits can be made in the web, and can also be made in the tube. After the tube is formed the slits can be made also. It can be made both ways.

31 Q. Have you read the British patent, this Vanderlip No. 9156, dated April 18, 1906? A. Yes, sir, I have.

Q. Of which I hand you a copy? A. I have read the Vanderlip patent.

A photostat copy of the British patent to Vanderlip 9156 is offered in evidence and marked Plaintiff's Exhibit 14.

By Mr. Dowe:

Q. Now, what does this British patent disclose, Mr. Poppe? A. Is that the British patent to Vanderlip or to Haseltine? Is the Vanderlip British also?

Q. Yes. What have you there? A. This here is the Vanderlip tube opened up.

Q. Is the Vanderlip bag produced from a tube? A. No. The Vanderlip bag is not produced from a tube. It is produced from a sheet of paper. The blanks are stamped out with a die.

Q. Will you explain to the Court how that is done according to the Vanderlip disclosure? A. This would be the size of the sheet of paper, and it is blanked out with a die. I mean this type here and the blank sheet, the over-all distance, that is the width and the length, are the same. Now, the waste is produced when this is blanked out. The waste is produced when this is blanked out. The waste is produced right here (indicating). This would be waste here (indicating), and this would be waste here (indicating).

Q. You have indicated the waste on your blank, have you? A. Yes, sir.

32 Q. You have indicated how the waste is produced? A. This is waste (indicating), that is waste (indicating), and this is waste (indicating). It is not made from a tube. It is merely blanked out from a sheet.

Q. What is the difference between the Vanderlip type of bag and your bag envelope? A. Well, the difference is in my invention there is no waste paper, and is made on an ordinary bag machine. And this here is not made from a roll of paper. It is merely blanked out from a sheet, possibly 500 at a time. And then these 500 blanked out sheets are put afterwards into an envelope machine, we call that, and opened, either fed from the top or from the bottom, one at a time, through the envelope machine.

Q. You do not get that idea from the Vanderlip patent, but from your practical knowledge of envelope making, is that correct? A. I do not get that.

Q. What you have just said is not found in the Vanderlip patent, this feeding from a machine. Does the Vanderlip patent describe any blanking out in detail? A. No. I get that merely from my experience. It is not described that way in their patent; no.

Q. Would it be possible to make the Vanderlip bag or Vanderlip article on a bag machine? A. No, it is not possible to make the Vanderlip bag on a bag machine, because there is no waste on a bag machine, due to the construction, that is, the tube consisting of a rear wall and its severing in one operation, and the top of one must fit perfectly in the bottom of another. And there is waste in this product. It cannot be made on a bag machine.

33 Q. Is there anything that you find as a practical man in the Vanderlip patent that suggests your improved bag? A. No, I can't say that there is.

Q. If you had been shown that kind of a patent in 1926 when you were experimenting would it have helped you any to produce this bag of your application? A. No, it would not, because there is waste, and it is impossible to make waste on a bag machine. It would not have helped me any, because there is waste in the manufacture of this. And the bag machine has to make a product from a roll of paper, and this is only made from a sheet.

The blanks produced by the witness are offered in evidence and marked Plaintiff's Exhibit 15.

Questioned as to the British patent to Haseltine, No. 1622, dated May 5, 1873, the witness stated:

I have read the British patent to Haseltine and it shows an improvement over what is known as a satchel bottom bag. It is merely a square grocery bag and is run on what is known as a flat and square grocery bag machine. We make this type of bag in regular production every day and I have been making them—or supervising the making of them—for the last sixteen years. The bag, I believe, has been made for at least forty or fifty years. It is probably one of the oldest bags that is made.

The British patent to Haseltine No. 1622 is offered in evidence and marked Plaintiff's Exhibit 16.

34 A bag illustrating the Haseltine construction is offered in evidence and marked Plaintiff's Exhibit 17.

By Mr. Dowe:

Q. Now, Mr. Poppe, would it be possible with the methods known to the bag art prior to your invention to make a long flap on the Haseltine bag? A. No, it is not possible to make a long flap on the Haseltine bag. Unless both sides of that flap are torn it has decidedly rigid edges, that is, it has not been slit in advance, either in the tube or the web.

Q. Is the flap of the Haseltine type bag intended ever to be folded over? A. No, it is not. It is merely a thumb hold. The flap is not intended to be folded over the opening in the bag. It is not meant for that purpose.

Q. In other words, there is nothing in the Haseltine patent to disclose to the art how to make a long flap successfully?

Samples of bag produced by the witness in his attempt to produce long lips on Haseltine bag are offered in evidence and marked Plaintiff's Exhibit 18.

The witness states that this is an ordinary flat grocery bag with a particular method of sealing. The witness produces a sample of this type of bag and states that except for the gumming on the back it is identical with Exhibit 4.

The Driver patent is offered in evidence and marked Plaintiff's Exhibit 19.

Sample bag is offered in evidence and marked Plaintiff's Exhibit 20.

35 Q. Is there anything in the Driver patent to suggest an envelope flap? A. No, there is not.

Q. I hand you United States patent to McCoy, and ask you if you have read it. A. Yes, I have read it.

Q. What do you make out of it? A. This patent here relates to a bag fastener. That is all that I can make out of it, is a crimped piece of sheet metal, which is fastened to the bag with a common tape. It is merely a bag fastener; so far as the bag goes why the drawings and explanation are so poor I really do not know what it is, as far as the bag goes, but they only claim a bag fastener of crimped material.

Q. There is no description you find in the patent of the bag as to how to make it? A. None whatever as to the bag.

Q. As a practical bag man what kind of bag would you say that was? A. I could only guess it was a flat bag.

Q. Like Exhibit 4? A. Yes. There is no explanation on the bag at all.

The patent to McCoy 599,858 is offered in evidence and is marked Plaintiff's Exhibit 21.

Q. Now, I show you United States patent of Hogan, one of the references cited in the case, and ask you if you have read that? A. Why, yes, sir, I have read this patent.

Q. And what do you make out of that patent, Mr.
36 Poppe? A. This Hogan patent is similar to the
Vanderlip. It is made from sheets of paper blanked out with a die, and there is waste just the same as on the Vanderlip bag. There is waste here and here (indicating). It is blanked out from sheets of paper, and it could not be run upon the bag machine.

Q. And it could not be made from the bag tube so far as you know? A. No, it could not be made upon the bag machine because there is waste.

The Hogan patent 1,359,063 is offered in evidence and marked Plaintiff's Exhibit 22.

By Mr. Dowe:

Q. I show you United States patent to Sullivan, one of the references cited by the Examiner, and ask you if you have read that patent? A. Yes, sir, I have read this patent.

Q. What does it disclose to you? A. The Sullivan bag is exactly the same as the Haseltine bag. It is square grocery bag, only they have the square bags continuous. On a bag they do not sever right across. One bag is connected to the other. And that bag is wound up into a roll, and they tear off one at a time just as they would gummed tape, or something of that description. It is the Haseltine grocery bag, one connected to the other.

The Sullivan patent 1,279,171 is offered in evidence and is marked Plaintiff's Exhibit 23.

37 Cross-examination.

By Mr. Hostetler:

Q. Mr. Poppe, will you refer to the Vanderlip patent, Exhibit 14, which, your Honor, is Exhibit F in the booklet.

The Court: Yes.

By Mr. Hostetler:

Q. (Continuing:) Do you find anything in the specifications to indicate that the blanks of the bag are cut from sheets of paper and not from a roll? A. Well, it is right here in their claims. They claim themselves that it is cut from a sheet of paper.

Q. Will you read it where the statement appears? A. Yes, sir. Referring to the drawings, by reference to numeral 1, it designates as an envelope which is constructed from a single blank of material.

Q. Yes. Will you read the brief description of Figure 5? A. Would that be this, Mr. Dowe, right on top here?

Q. Is not Figure 5 described "Figure 5 is a plain view of the blank from which the envelope is formed"? Now, is not Figure 5 the blank from which envelope 1 is formed? A. Figure 5 is the blank from which the envelope is formed? Right.

Q. Yes. Now, there is no statement in this specification that I can find that says that the blank 5 is cut from a sheet of paper. Did you not confuse blank in that specification as meaning a sheet of paper from which Figure 5 was cut? A. Well, this blank must have been cut from a sheet of paper, because there is waste. 38

Q. Now, let us see if there is waste. Look at Figure 5. Suppose we cut out a series of those blanks from a long strip of paper. Would not that flap 7 sheet fit into the space between the flaps 4 at the top of that blank? A. No, it would not. I can show that.

Q. Why not?

Mr. Dowe: May I suggest that Mr. Poppe refer to the exhibit he has in his hand.

Mr. Hostetler: I prefer to discuss that question from Figure 5 of the drawing, but he can use his blank for his illustration. My question though is directed to Figure 5 of the Vanderlip patent.

The Witness: That is deceiving to the eye. But if you look at that close why you can see the difference even before I open up the blanks. Do you see these two?

Mr. Hostetler: Explain it to the Court.

The Court: Figure 5 of which patent.

Mr. Hostetler: Of the Vanderlip patent, Exhibit F.

The Court: Yes.

The Witness: These dotted lines, that is the width of the bag from this dotted line over through this dotted line (indicating), that is the width of the bag, you will note that this is the widest point of this flap, from here to here is the widest point and on the bottom it is narrower. You see, right here (indicating) where I am pointing, it is
narrower on the bottom than here (indicating), and
39 the widest point of this flap is equal to the width of
the bag.

Now, when you go to the top you take the widest point from here to here (indicating) and that is wider than the bag. You see, that can be seen with the eye. But I can show it with these samples here (indicating).

You see, this is the widest point of the flap right here (indicating). That is the exact width back from here to here (indicating). That is the widest point of this flap, and then it gets narrower.

Now, here (indicating) is the narrowest point of this bag, and that narrowest point is equal to the width of the bag, and as you go up it gets wider; in other words, this here face here (indicating) can be seen with the eye and is greater across here than here (indicating). You can see if you follow that line (indicating).

The Court: Yes. I see.

The Witness: All right. This is the widest point, only when you go this way it gets wider (indicating), and on the bottom it gets narrower, and up here it gets wider (indicating). So that it can be seen just on the drawings that one does not fit into the other. So I will show it on the samples here. It is pretty hard to see.

Mr. Hostetler: For the sake of expediting the work in the case, I will admit that accurate measurement would show that the flap 7 would not quite fit into 4. But I want to read also into the record that—and there is authority for it—that patent drawings are not supposed to be working drawings. They merely illustrate what is in the mind of the inventor.

40 By Mr. Hostetler:

Q. Now, I will ask you another question. Eliminating the question of waste, if such is the case in cutting these from a strip of paper, would not 7 fit into substantially between the points 4, and if there is any wasting what would be the shape of the waste? A. Why, the waste would be——

Q. (Interposing.) The most narrow strips, would it? A. A very narrow strip that would look similar to the gussets in my bag.

Q. Now, when the next blank was cut from the top of the other one would not the space between the flaps 4 form the flap 7 of the next bag? A. Now, it would not.

Q. Why not? A. According to the drawing it would not.

Q. Eliminating the question of waste? A. Yes, sir. You mean could it be done that way? Is that what you mean?

Q. Yes. A. Is it possible to do it that way?

Q. Yes. A. It might be possible to do that. But it would be impractical to make a cut-off like that.

Q. Why? A. Well, that would be due to the construction of the dies going straight across like this (indicating) and the sharp corners in a die as a rule they allow a slight shearing effect, in other words, a very slight angle
41 up here so the die comes in contact with the high
point of the roller. But this way, it being absolutely straight, that die must come down at once across the whole top of the holder, where if merely at an angle it would merely ride over the high point of the roller.

Q. Is it not a fact, if you know, that in cutting the cartons for packages, for illustration the Shredded Wheat carton, aren't they cut from a big roll of paper, printed and sliced off with no waste? A. Well, that I really couldn't tell you. That I don't know.

Q. Taking that same Figure 5 as a blank, no matter how it is made, are not the two flaps marked 2, I might say bent backward, and 3, for instance, the front of that bag, flaps 2 and 2 pasted together, would form the back of it? A. That is so.

Q. Would not the two flaps 4—4 pasted together form the top of the bag as shown in Figure 1? A. Well, it looks like it does to me. On Figure 1 they have an angular effect to the top of the mouth, and on Figure 5 they show it straight. But it would be practically similar when folded over and pasted together. It would be almost similar to Figure 1.

Q. Aren't you mistaken about these oblique edges? The inner edges of the flaps 4 down below become the outer edges when the flap is folded inwardly at the top. It is the straight edges that are pasted over each other and the oblique edge becomes the edge of the envelope? A.
42 The straight edges are folded over one another, and it would appear straight on top, that is Figure 5, and Figure 1 would be all right. But I refer to this slight angle here, you see, (indicating) when these two 4 and 4 are folded back and pasted together this is straight (indicating) and that is straight (indicating). All right. But this here then would be the front and the back of the envelope. Now, they show a slight angle here, where this is straight here, you see (indicating). May I say something further?

Q. Yes, sir. A. You take on the Vanderlip bag, if they want to make that without waste, as you say, why then the draftsman would have shown a dotted line here (indicating) for the gusset that is on the bottom of the bag. After all we will say that it is not an exact drawing like a working drawing like you say, but at least the draftsman should have shown a dotted line here at the bottom.

Q. Where? A. That is of Figure 1. If there were no waste there would be a dotted line in the corners showing a gusset, but there is not any dotted line there. So that shows that there must be waste.

Q. There is a dotted line there. A. Well, that is deceiving. You see what I mean. If this (indicating) were fitted exactly into there (indicating), then a gusset would be produced exactly the same as on a bag, and when that bottom was folded over why that gusset there should be shown here with a dotted line on the bottom.

43 Q. Where should the dotted line be? A. The dotted line should be right here in the corner (indicating), right here. This only shows the flap which is folded up on the back side of the bag. This is the back side of the bag (indicating).

Q. And it shows the dotted line obliquely there. A. It shows the same on the back side of the bag, also the same in the center.

Q. Now, take your Exhibit 6, which I believe is the open ended bag of your invention—if the Court would take the exhibit I think you are probably familiar with it—would not the part 3 of Figure 5 form the full face of this bag? A. Yes, it would.

Q. Would not this flap down here correspond with the flap 7? A. No.

Q. What would be the difference? A. The difference is that there is waste paper on here (indicating).

Q. Well, excluding the waste. A. Yes, it would be the same. The flap would fold towards the back of this bag.

Q. Is not the flap at the top of this open ended bag formed by two overlapping portions of paper? A. Yes, it is.

Q. Would not that correspond in general structure with the flaps 2—2 of Figure 5, bent backward and pasted
44 together? A. It would, yes sir. Yes, it would.

Q. And this flap at the top formed two overlapping faces, would it not correspond to the two flaps 4—4 pasted together? A. It corresponds to it?

Q. Yes. A. Yes.

Q. Then we would have in general outline, excluding the question of strips of waste, a form here (indicating) which corresponds with this open ended exhibit? A. Yes, if you want to eliminate the waste in that, yes, sir.

Q. And if you have read the claim can you tell me whether Vanderlip claims any novelty in the bag itself, or what is his invention, his novelty? A. I will have to glance over this.

Mr. Dowe: If your Honor please, just a moment. The witness is not qualified as a patent expert. He is not a patent expert. He is merely an inventor. I do not know that he can discuss the matter of claims very successfully.

Mr. Hostetler: I will ask a different question.

The Witness: I might say they do not claim anything on the bag, it is merely the metal strip for sealing the top.

Mr. Dowe: Mr. Hostetler will frame the question differently. I do not want to get into a claim discussion if we can avoid it.

By Mr. Hostetler:

Q. What does the figure numeral 6 represent at the
45 top of Figure 2? A. At the top of Figure 2?

Q. Yes. A. Well, that is the flap being turned inside the bag.

Q. Does Figure 1 at the top show a pocket? A. Figure 1 at the top shows a pocket for the insertion.

Q. Of metals? A. A metal strip.

Q. That is also shown in Figure 3, is it not, in cross section? A. That is also shown in Figure 3.

Q. That is the pocket with the metal strip? A. That is the pocket in which the metal strip is supposed to be inserted. When the flap is folded down it would stay down. That is the object of the invention, I believe.

Mr. Hostetler: Now, to expedite the examination I will read into the record the only claim of that patent, which is found at the end of this specification:

"An envelope wherein the side flaps are secured together in a manner to provide a pocket for the reception of a flexible metal strip, said pocket being located in the envelope to permit the sealing flap of the envelope to be secured in closed position, by bending the said flexible strip."

You see by this claim that no novelty is claimed for the bag, but it is merely in that metal strip, the metal strip to hold the bag closed.

46 By Mr. Hostetler:

Q. Now, will you turn to the McCoy patent, which is Plaintiff's Exhibit 21, but Exhibit A in the booklet. *Q.* You stated there was only a crude description in the specification of the McCoy patent, did you not? A. Yes, sir.

Q. What is the novelty in that bag? A. It is a clinched piece of metal, placed onto the back, either pasted or it states here a sheet of paper. Here it says the fastener is clinched along its entire length. Figure 5 represents a strip pasted over the clinched metal strip secured to the back. This is a clinched piece of metal and is fastened to this bag with a strip of paper pasted over the metal strip.

Q. We are safe then in assuming then, I presume, that McCoy claimed no novelty in the bag, but in the fastening means? A. A bag fastener, yes.

Q. Turn now to the next patent, Sullivan, Exhibit D. Figure 1 of that patent is a tubular strip of paper pasted together, is it not? A. Yes, sir.

Q. And the bags are cut from that? A. The bags are cut from that, but they are connected together on the outer edges. They are continuous. That is the Haseltine square bag, but they are connected together on the outer edges.

Q. Will you turn now to the Hogan patent, Exhibit C? The novelty there, may we assume, is in the parts 11 and 12, or in the closing means rather than in the bag.
47 A. It is in that little closing device wherein they may open the envelope and find out what is inside; in other words for second class mail, without splitting the envelope they can examine the contents.

Redirect examination.

By Mr. Dowe:

Q. Mr. Poppe, in attempting to make the Vanderlip bag, on a bag machine, would the fact of this pocket and the insert present difficulties of a practical nature? A. Yes. I don't see how this could be made all in one operation. This bag is made from a blank sheet, as they say here, and then it would have to be fed through a separate envelope machine. But as near as I can make out the only way that piece of metal could be inserted between the seam in this pocket would be by hand. I cannot see any method how that short piece of tin or metal could be inserted between the seam by a machine.

Q. Then the process of making that would be extremely slow, would it not? A. If it could be done it certainly would be extremely slow, if it is possible to do it.

Mr. Dowe: That is all, your Honor.

(Witness excused.)

Maurice Rosenfield, called as a witness on behalf of plaintiff, testified as follows on direct examination by Mr. Dowe:

I am a manufacturer and president of the Equitable Paper Bag Company. I have been a manufacturer twenty-eight years and manufacture paper bags, envelopes,
48 bags for millinery, notions, candy and sacks. I also
manufacture the articles represented by Plaintiff's Exhibits 3, 4, 5 and 5-A. These exhibits were made in my factory and the particular bag envelope identified by Exhibit 5 is known commercially as the Bag of Tomorrow. A bag like Exhibit 5-A is known in the trade as a square flap bag. The bag of Exhibit 9 is known in the trade as a packeting bag.

I first began to supply the trade with bags of the types of Exhibits 5 and 5-A in March 1927 and the first order received was one from Sears Roebuck & Company for 200,000 of one size of the square flap.

The witness then produces order No. C-76460 dated March 11, 1927. It is offered in evidence and marked Plaintiff's Exhibit 24.

Witness, continuing: I personally received this order from Sears Roebuck and Company. Since that time our company has produced and sold large quantities of these bags. I have a memorandum taken from our actual records showing that in 1927 we sold 425,000 of the square flap identified as Exhibit 5A.

In 1928 we sold 760,000 of the square flap as shown in Exhibit 5-A.

In 1929 we sold 61,000,000 which included both types as exemplified in Exhibits 5 and 5-A which latter is known as the envelope type.

In 1930 we produced 83,000,000 of which almost 99%
were of the envelope type similar to Exhibit 5.

49 In 1931 we sold 97,000,000 of Exhibit 5 and also
Exhibit 9, the packeting type.

In 1932 we sold 120,000,000 of both the Exhibit 5 envelope type and Exhibit 9, the packeting type. We have today unfilled orders of approximately 60,000,000 of the envelope type and packeting type and we are going to produce much more because we have just put up another building and have scheduled and laid out to fix up a number of machines because the demand is so great for these bags.

Summing up, all told we have sold 363,000,000 and with the order for 60,000,000 we have on hand makes 423,000,000 up to the present time.

No cross-examination.

I hereby agree that the above statement of evidence is correct and that the same may be approved by the Court.

May 15, 1933.

T. A. HOSTETLER,
Solicitor for the Patent Office,
Attorney for Defendant.

The foregoing contains the substance of all of the evidence given on the hearing of this cause, and the same is accordingly approved as such to become and be part of the record on the appeal in the said cause, this 26th day of July, 1933.

F. DICKINSON LETTS,
Justice.

50 In the Court of Appeals of the District of Columbia.

Docket No. 6035.

Equitable Paper Bag Company, Inc., Plaintiff,

vs.

Thomas E. Robertson, Commissioner of Patents, Defendant.

Addition to Record by Stipulation of Counsel.

It is hereby stipulated and agreed, between counsel for the parties to the above entitled cause, that the following exhibits introduced in evidence on trial in the Supreme Court of the District of Columbia be, and hereby are, made a part of the Transcript of the Record in the case and printed by the Clerk as such, the same to follow the Statement of Evidence therein:

Plaintiff's Exhibits.

No. 1. Certified copy of the file wrapper and contents of Application for Letters Patent of George W. Poppe, Serial No. 435,844, filed March 14, 1930, for Improvements in Paper Bag.

No. 2. Patent No. 1,798,168, George W. Poppe, March 31, 1931.

No. 7. Two production sheets.

No. 13. Patent No. 1,851,060, George W. Poppe, March 29, 1932.

No. 14. British patent to Vanderlip, No. 9156 of 1906.

No. 16. British patent to Haseltine, No. 1622 of 1873.

No. 19. Patent No. 1,661,884, Driver, March 6, 1928.

No. 21. Patent No. 599,858, McCoy, March 1, 1898.

51 No. 22. Patent No. 1,359,063, Hogan, November 16, 1920.

No. 23. Patent No. 1,279,171, Sullivan, September 17, 1918.

No. 24. Sears, Roebuck & Company, Order No. C 76460, dated March 11, 1927.

It is further stipulated and agreed, by counsel for the parties in the above entitled cause, that the following exhibits introduced in evidence on trial in the Supreme Court of the District of Columbia, which cannot be reproduced in the printed record, are to be used as physical exhibits on the argument:

Plaintiff's Exhibits.

No. 3. Ordinary center seamed open end envelope.

No. 4. Ordinary flat grocery bag.

No. 5. Envelope flap bag, Mr. Poppe's invention, manufactured in an ordinary bag machine.

No. 5A. Square flap bag, Mr. Poppe's invention, manufactured in an ordinary bag machine.

No. 6. Envelope blanks.

No. 8. Model of a machine.

No. 9. Packeting bag.

Nos. 10, 11 and 12. Lip Knives.

No. 15. Vanderlip blank.

No. 17. Haseltine bag.

No. 18. Samples of the Haseltine bag produced by Mr. Poppe in his attempt to produce long lips.

No. 20. Bag made according to the Driver patent.

GEORGE M. DOWE,
Attorney for Plaintiff.
ARLON V. CUSHMAN,
CUSHMAN, DARBY & CUSHMAN,
Solicitors for Plaintiff.

T. A. HOSTETLER,
Solicitor for Defendant.

52 [Endorsed:] 6035. Equitable Paper Bag Co., Inc., Appellant, vs. Thomas E. Robertson, Commissioner of Patents. Addition to Record per Stipulation of Counsel. Court of Appeals, District of Columbia. Filed Jul. 29, 1933. Henry W. Hodges, Clerk.

52*a* In the Court of Appeals of the District of Columbia.

Docket No. 6035.

Equitable Paper Bag Company, Inc., Appellant,

vs.

Conway P. Coe, Commissioner of Patents, Appellee.

Stipulation.

It is stipulated by counsel for the respective parties in the above-entitled cause that only the following parts of Exhibit No. 1 be printed in the record:

The specification and claims. (These are included in pages 3 to 10 of Exhibit No. 1.)

The Examiner's Statement on Appeal. (This is included in pages 72 to 75 of Exhibit No. 1.)

The Decision of the Board of Appeals. (This is included in pages 80 to 83 of Exhibit No. 1.)

The application drawings. (These are pages 140 and 141 of Exhibit No. 1.)

ARLON V. CUSHMAN,
Attorney for Appellant.
T. A. HOSTETLER,
Attorney for Appellee.

August 26, 1933.

52*b*-56 [Endorsed:] In the Court of Appeals of the District of Columbia. Equitable Paper Bag Company, Inc., appellant, vs. Conway P. Coe, Commissioner of Patents, appellee. Docket No. 6035. Stipulation. Arlon V. Cushman, Esq., American Security Bldg., Washington, D. C., attorney for appellant. T. A. Hostetler, Commerce Building, Washington, D. C., attorney for appellee. Court of Appeals, District of Columbia. Filed Aug. 26, 1933. Henry W. Hodges, clerk.

* * * * * * *

57 The present invention pertains to a new and useful improvement in receptacles made of paper and more specifically the invention includes a new and improved paper bag of the type having a closing flap or lip.

The present application is a division of my application Serial No. 316,462, filed November 1, 1928.

In the practical art of bag manufacture a distinction is made between what are known as bags and what are known as envelopes, due to the process and machines for making the two separate types of receptacles. Envelopes, in the practical art, are formed in such a way that the flaps closing the envelope are a continuation of the web from which the envelope is formed but both flaps fold on the same side of the completed article.

Paper bags, on the other hand, are formed by folding a web of paper longitudinally to form a tube-like structure which is severed into predetermined lengths to form a bag, one flap of which is a prolongation of the upper portion of the tube-like structure while the other flap is a prolongation of the other or opposite portion. In such a bag the free or closing flap contains a portion of the seam due to the fold.

The severing of the paper bags from the tube-like structure is accomplished by a so-called chopping action which consists in holding the tube-like structure under tension and in engagement with the cutting edge of suitably arranged knives, in which position the tube-like structure is subjected to a sudden blow, the impact of which serves to sever it along its line of engagement with the knives.

58 So far as I am aware, in all bags of the type above mentioned the outer edge of the closing lip or flap is continuous and when the flap is folded to bag-closing position it does not sufficiently overlap the body of the bag corners to afford the necessary protection to the bag contents nor do such bags present as good an appearance as when the flaps are longer, as in envelopes.

It has heretofore been the practice when it is desired to protect articles from dust, etc. to use envelopes in which the closing lip or flap forms an effective dust-proof closure. Receptacles of this type, however, are expensive due to waste incident to their method of manufacture and to the relatively slow operation of the machines by which they are made and the cost of these envelopes, which is considerably greater than that of paper bags, prohibits their use except for certain types of merchandise.

It is one of the objects of the present invention to provide a paper bag having a closing flap similar to that of an envelope but which can be produced without any waste and as rapidly as an ordinary paper bag.

In my application, Serial No. 316,462, above referred to, of which this case is a division, I have shown a preferred method and machine whereby my improved envelope bag may be commercially produced.

In the accompanying drawings I show my improved bag and also indicate some of the steps in its production.

59 In said drawings:

Figure 1 shows a portion of a web of paper having slits or cuts therein, which web is folded to from a bag tube. This figure also shows two severed bag lengths, the lower of which indicates the bag with the lower flap folded over;

Figure 2 is a reverse view of the bag shown in the lower part of Figure 1;

Figure 3 is a portion of a web of paper similar to that shown in Figure 1 except that the slits or cuts are formed at an angle to the longitudinal axis of the web;

Figure 4 shows the manner in which a bag length may be severed from the folded web;

Figure 5 is a view of a severed bag length; and

Figures 6 and 7 are reverse views of a completed bag.

Since it is the object of my invention to provide a bag so designed as to have the desirable characteristics of an envelope as well as those of a bag, but nevertheless one which may be produced automatically at high speed, it is in order to outline a method which may be employed in its production.

Referring to Figure 1, a web of paper having cuts or slits 110 therein is folded along two lines, one of which is indicated at 112, and pasted along the line indicated at 114. The bag tube thus formed is severed into bag lengths by well known chopping mechanism, such, for instance, as that shown and described in my application Serial No. 316,462.

The upper detached bag length shown in Figure 1
60 indicates the tube as having been severed along lines
which meet the ends of the slits 110, the upper tube wall, i. e., the one having the pasted seam 114, being severed along the line 116 and the lower tube wall being

severed along the line 118. Such a bag length is provided at each end with a flap, the flap at one end being a prolongation of one side of the bag body while the flap at the other end is a prolongation of the other side of the bag body. In Figure 1 these flaps are designated by the reference numerals 122 and 124. In the completed bag the flap 122 is folded over into engagement with what then becomes the
rear
Per A. [front]* ∧ wall of the bag and secured thereto,
to form the bottom. The flap 124 is employed for closing the bag when in use and may or may not be provided with gum or other suitable adhesive by which it may be retained in bag-closing position. It is foldable over the front wall of the bag as indicated in Figure 2.

For convenience of reference the front wall of the bag is that shown in Figure 2, the rear wall having the seam 114 as indicated in Figure 1. It will also be noted that the closing flap 124 includes this seam.

In Figures 3 to 7 a bag having a somewhat differently shaped flap is formed, the slits 130 forming the end edges of the closing flap being angularly disposed in respect of the longitudinal axis of the web. Since it is an object of the invention to produce a bag having a closing flap of sufficient length to properly protect the bag opening and also one having the appearance of an envelope flap, the
61 side edges of the flap are made smooth or in other
words they are non-serrated. This may be done by slitting or die-cutting the web, as explained in my application Serial No. 316,462, above referred to. The web shown in Figure 3 is folded as indicated in said figure and severed into bag lengths by suitable chopping mechanism such as described in my copending application. The lines of severance meets the ends of the cuts 130 and a bag such as shown in Figures 6 and 7 is the result. It will be noted by reference to Figures 4 to 7 that the bag lengths have a flap at each end thereof, and such flaps are a prolongation of the opposite sides of the bag length or tube walls. In Figures 4 to 7 these flaps are designated by the reference characters 132 and 134 respectively. It will also be noted that when the bag lengths are severed in the manner indicated in Figure 4 the side walls of each bag length opposite the

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[*Words and figures enclosed in brackets erased in copy.]

lower flap 132 will be formed with a side wing portion 136 which serves to entirely close the bottom of the bag length when the flap 132 is folded along the dot and dash line 140, Figure 5. The free or closing flap 134 of each bag length has angular end edges 130 which extend from the outer edge of the flap entirely to the base thereof. When such a flap is folded over to close the bag in use, the fold is made along the line 142, Figure 4, and owing to the end edges of the closing flap 134 extending to the base of the flap, or in other words to the line of fold 142, a complete dust-proof closure at the outer corners of the bag body is likewise provided.

62 From the foregoing it will be apparent that the present invention provides a new and improved paper bag in which the closing flaps or lips are so constructed as to assure a dust-proof closure for the bag and to provide a bag, the appearance of which is entirely different from that of an ordinary bag.

63 What is claimed as new is:

Canc. per A.

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1. As an article of manufacture a paper bag having a front wall and a rear wall, a flap at each end of the bag, the flap at one end being a prolongation of the front wall and foldable over the rear wall to close its respective end of the bag and the flap at the opposite end of the bag being a prolongation of the rear wall and foldable over the front wall to close its respective end of the bag, one of said flaps having non-serrated side edges.

2. As an article of manufacture a bag envelope having a front wall and a rear wall, a bottom flap formed as a prolongation of the front wall and folded over onto the rear wall, a closing flap formed as a prolongation of the rear wall and foldable over the front wall, said latter flap having non-serrated side edges.

3. As an article of manufacture a bag envelope having a front wall and a rear wall, a bottom flap formed as a prolongation of the front wall and folded over onto the rear wall, a closing flap formed as a prolongation of the rear wall and foldable over the front wall, said latter flap having a top edge and side edges, the latter meeting the top edge at an angle.

64-125 4. As an article of manufacture a bag envelope having a front wall and a rear wall, a bottom flap formed as a prolongation of the front wall and folded over onto the rear wall, a closing flap formed as a prolongation of the rear wall and foldable over the front wall, said latter flap having a serrated top edge and non-serrated side edges.

5. As an article of manufacture a bag envelope having a front wall and a rear wall, a bottom flap formed as a prolongation of the front wall and folded over onto the rear wall, a closing flap formed as a prolongation of the rear wall and foldable over the front wall, said latter flap having non-serrated side edges and a top edge, the side edges meeting the top edge at an angle.

[Matter enclosed between rules erased in copy.]

Insert A & B.

* * * * * * *

126 [Stamp:] Mailed Nov. 18, 1930.
F:AEG.

Div. 40, Room 262, Annex.

Paper No. 17.

Department of Commerce, Patent Office, Washington.

In re Application of GEORGE W. POPPE. Ser. No. 435,844.
Filed Mar. 14, 1930. For Paper Bag.

Appealed Before the Board of Appeals.

Examiner's Statement, November 18, 1930.

This is an appeal from the action of the Primary Examiner in finally rejecting the following claims:

6. As an article of manufacture, a bag envelope, machine made from a bag tube and having a front wall and a rear wall, a bottom flap formed as a prolongation of the front wall and folded over the rear wall, a closing flap formed as a prolongation of the rear wall and foldable over the

front wall, said latter flap having a serrated end edge and non-serrated side edges.

7. As an article of manufacture, a bag envelope, machine made from a bag tube and having a front wall and a rear wall, a bottom flap formed as a prolongation of the front wall and folded over onto the rear wall, a closing flap formed as a prolongation of the rear wall and foldable over the front wall, said latter flap having a serrated top edge and non-serrated side edges, the latter meeting the top edge at an angle.

8. As an article of manufacture, a bag envelope, machine made from a bag tube and having a front wall and a rear wall, a bottom flap formed as a prolongation of the front wall and folded over the rear wall, a closing flap formed as a prolongation of the rear wall and foldable over the front wall, both flaps having serrated end edges and said closing flap having non-serrated side edges.

9. As an article of manufacture, a bag envelope, machine made from a bag tube and having a front wall and a rear wall, a bottom flap formed as a prolongation of the front wall and folded over the rear wall, a closing flap formed as a prolongation of the rear wall and foldable over the front wall, both flaps having serrated end edges and said closing flap having non-serrated side edges, said latter edges meeting the top edge at an angle.

10. As an article of manufacture, a bag envelope, machine made from a bag tube and having a closing flap possessing machine cut side edges of substantial length.

11. An article of manufacture, a bag envelope having a front and a rear wall, a bottom flap formed as a prolongation of the front wall and folded over onto the rear wall, a closing flap formed as a prolongation of the rear wall and foldable over the front wall, said closing flap having a serrated top edge and non-serrated side edges of substantial length.

12. An article of the character set forth in Claim 11, in which the side edges meet the top edge at an angle.

13. An article of the character set forth in Claim 11, in which both flaps have serrated end edges.

127 14. An article of the character set forth in Claim 11, in which both flaps have serrated end edges and in which the side edges of the closing flap meet the top edge thereof at an angle.

15. A machine-made bag envelope having a closing flap, said flap having machine-cut side edges of substantial length.

The references relied on are:
Driver, 1,661,884, Mar. 6, 1928.
McCoy, 599,858, Mar. 1, 1898.
Hogan, 1,359,063, Nov. 16, 1920.
Sullivan, 1,279,171, Sept. 17, 1918.
Haseltine (British), 1,622, May 5, 1873.
Vanderlip (British), 9,156, Apr. 18, 1906.

The subject matter claimed relates to a paper bag having a front side and a rear side formed by overlapping flaps. The bottom is closed by a flap which is a prolongation of the front wall and the closure flap is formed by a prolongation of the rear wall. The horizontal edges of the closure flap is serrated.

The patent to Vanderlip shows a paper bag which is substantially the same as applicant's bag. His rear wall is formed from overlapping flaps 2—2 and the bottom is closed by a prolongation 7 of the front wall. The closure flap 4 is formed as a continuation of the rear wall. A development of applicant's bag would reveal a blank such as shown by Vanderlip. The serrated condition of applicant's closure flap is deemed to be the sole novelty in applicant's finished bag, over the bag of Vanderlip.

Hogan shows a bag of the type shown by Vanderlip.

Driver, McCoy and Haseltine show that it is old to form bags with closure flaps which have serrated horizontal edges and non-serrated side edges.

The patent to Sullivan shows that it is conventional practice to form a bag from a continuous tube, which is cut at intervals with a cutter which leaves serrated edges on the tube.

128 Applicant has laid great stress on the advantages of forming a bag by his particular method. Claims to the specific method have been allowed in applicant's parent application, 316,462. Although applicant's method may be new, it is not seen wherein a patentably new article has been produced. The serrated condition of the bag is not deemed to be the *cause* of any advantages in the method, but is believed to be a mere mark or evidence of the fact that the bag was formed by a certain cutting operation

or in a certain machine. Furthermore, the novelty in the method was *not* predicated on the serrated condition but on the steps in which the slits 110 (Figure 1) are formed.

In the finished bag, the serrations have no utility. The bag can obviously serve its purpose whether the flap is serrated on plain as in Vanderlip. It is also obvious that applicant's method as claimed in the parent application can be practiced without cutting on serrated lines.

In view of the practice of forming serrations on bags as evidenced by Haseltine, McCoy and Driver, the examiner held that no invention would be required to form same on Vanderlip's bag.

The claims were further rejected on Haseltine, whose arrangement of serrations is the same as shown by applicant and whose bag is also *machine made* from a *bag tube*. The Examiner held that to omit Haseltine's side bellow folds and form his bag as a flat envelope bag of the conventional type would not involve invention.

Claims 6-10 and 15 which include such limitations as "machine made from a bag tube" were further rejected on the grounds that they were improper method claims as they attempted to define the article by the method. This action was made in accordance with, in re Butler 37 F. (2) 623
and ex parte Fesenmeier 1922 C. D. 18.

129-133 Conceding that applicant's *specific method* as
expressed in the claims allowed in the parent application 316,462 (Div. 17) is patentable, the examiner was unable to perceive any patentable novelty in the *article*, even if weight would be given to the improper method limitations in the claims in this case.

Respectfully,

J. J. OBERLIN,
Examiner.

H. B. F.

* * * * * * *

134 [Stamp:] U. S. Patent Office, Board of Appeals. May 29, 1931. Mailed.

Appeal No. 923, Paper No. 22.

Decision.

OVT.

Hearing: May 21, 1931.

In the United States Patent Office.

Before the Board of Appeals.

Appeal No. 923.

Ex Parte George W. Poppe.

Application for Patent. Filed March 14, 1930. Serial No. 435,844. Paper Bag.

Messrs. Newell & Spencer for applicant.

This is an appeal from the decision of the Primary Examiner finally rejecting claims 6 to 15 inclusive.
Claims 6 and 10 are illustrative and are:

6. As an article of manufacture, a bag envelope, machine made from a bag tube and having a front wall and a rear wall, a bottom flap formed as a prolongation of the front wall and folded over the rear wall, a closing flap formed as a prolongation of the rear wall and foldable over the front wall, said latter flap having a serrated end edge and non-serrated side edges.
10. As an article of manufacture, a bag envelope, machine made from a bag tube and having a closing flap possessing machine cut side edges of substantial length.

The references relied upon are:
McCoy, 599,858, Mar. 1, 1898.
Sullivan, 1,279,171, Sep. 17, 1918.
Hogan, 1,359,063, Nov. 16, 1920.
Driver, 1,661,884, Mar. 6, 1928.
Haseltine (British), 1,622, May 5, 1873.
Vanderlip (British), 9,156, Apr. 18, 1906.

135 The invention is a paper bag envelope. It is intended to be made by a machine from a bag tube, said tube having been slitted at intervals to form the side edges of the flaps when the bag envelope is finished. The bag envelope is provided with a bottom flap which is an extension of the front wall of the bag envelope and is folded over the rear wall. The closing flap at the open end is a prolongation of the rear wall and is folded over the front wall. Each flap has a serrated end edge and non-serrated side edges.

The examiner relies especially on the Vanderlip patent in rejecting the appealed claims. This patent appears to show the same type of bag envelope, as the bottom flap is folded over the rear wall and the top flap is folded over the front wall. A metal strip 6 is used to aid in retaining the closing flap in closed position, but this is an additional feature not present in the present application. Of course the omission of this metal strip together with its function is not inventive. In Fig. 2 the flap is folded inside the bag but in Fig. 4 it is folded outside. The end edges of the flaps are not serrated in this patent but this feautre is old in McCoy and hence involves no invention. These serrations merely result from the fact that sharp teeth are used on the tearing edges of the machine in which the bag is made and by themselves appear to have no particular function to perform. Applicant urges that there will be some waste of material in forming the bag envelope in
136 the manner shown in the patent whereas there is no
waste in applicant's method. The claims do not relate to the method of making the bag and do not recite any steps by which there will be no waste. At any rate as far as the claims are concerned they read on the bag envelope shown in the Vanderlip patent in all essential respects.

Applicant further urges that the limitation "machine made from a bag tube" is material and is sufficient to distinguish the invention from this patent. It is stated that prior to applicant's invention it has been impossible to make bag envelopes by machine from a bag tube so that the finished envelope would have comparatively long flaps and which have straight side edges. Applicant by first slitting the bag at proper intervals is able to make such a bag envelope from a bag tube on a machine. This being the case applicant urges that the above referred to limitation in the claim is sufficient to avoid the prior art. The decision of Dunn Wire-Cut-Lug Brick Co. v. Toronto Fire Clay Co. et al., 259 F. 258, is cited in support of this view. We do not believe the facts in that decision are similar to those in the present application. The patent involved related to a wire-cut brick and the product was entirely new as it was a non-pressed brick having spacing ridges on it. In the present case the final product is not new as it is shown in every important particular in Vanderlip. In the brick case the patentee happened to define his product by reference to the wire cutting but the product was new and 137–139 hence the court sustained the patent. If the appealed claims are to be regarded patentable because the bag envelope is made by a machine from a bag tube almost any product could be considered patentable for the same reason if it had never before been made by a machine. We are unable to find that the limitation "machine made from a bag tube" is sufficient to define the invention in patentable respects over the Vanderlip patent when considered in connection with the remaining references. Claims 11 to 14 do not include this limitation.

We believe that all of the claims are unpatentable over the prior art especially Vanderlip.

Claims 6 to 10 and 15 have also been rejected as improper method claims because it includes the step of making the article. Applicant urges that the expression "machine-made from a bag tube" does not refer to the method of making but that this expression sets out some characteristic of the envelope. Whatever the expression means we think it is not clear and renders the claim to some extent indefinite and we think the examiner is correct in this ground of rejection.

The new claims presented cannot be considered for reasons set forth in ex parte Moore 1923 C. D. 13.

The decision of the examiner is affirmed.

WM. A. KINNAN,
First Assistant Commissioner,
W. L. REDROW,
Examiner-in-Chief,
F. R. EDINBURG,
Examiner-in-Chief,
Board of Appeals.

May 29, 1931.

Endorsed on cover: District of Columbia Supreme Court. No. 6035. Equitable Paper Bag Co., Inc., appellant, vs. Conway P. Coe, Commissioner of Patents. Court of Appeals, District of Columbia. Filed Jul. 29, 1933. Henry W. Hodges, Clerk.

(Here follow diagrams marked pages 140 and 141.)

221/53

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435844

2-1

6835 Equitable Paper Bag Co., Inc., Vs. Thomas E. Robertson. Commissioner of Patents.

294/188

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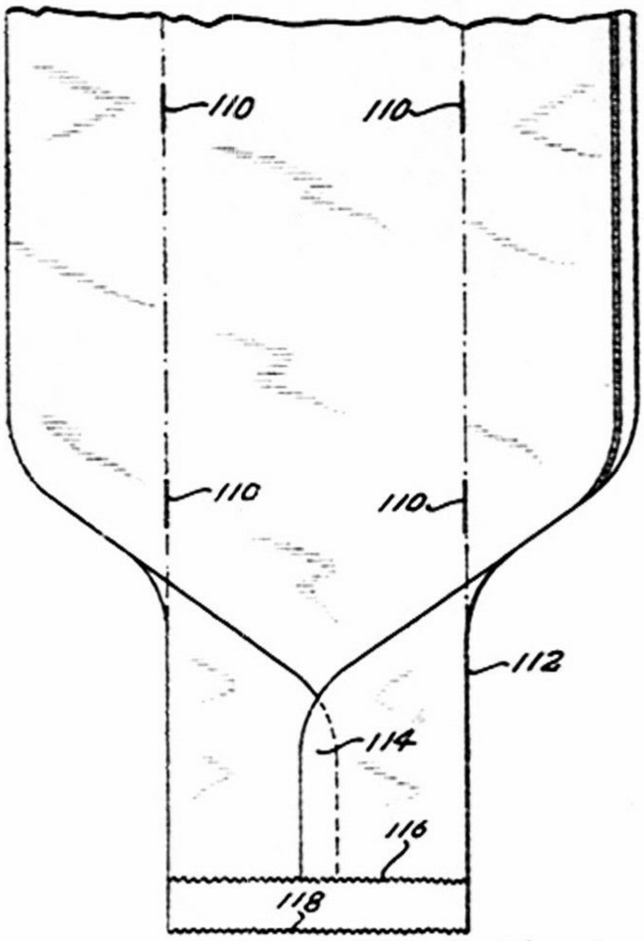


Fig. 1.

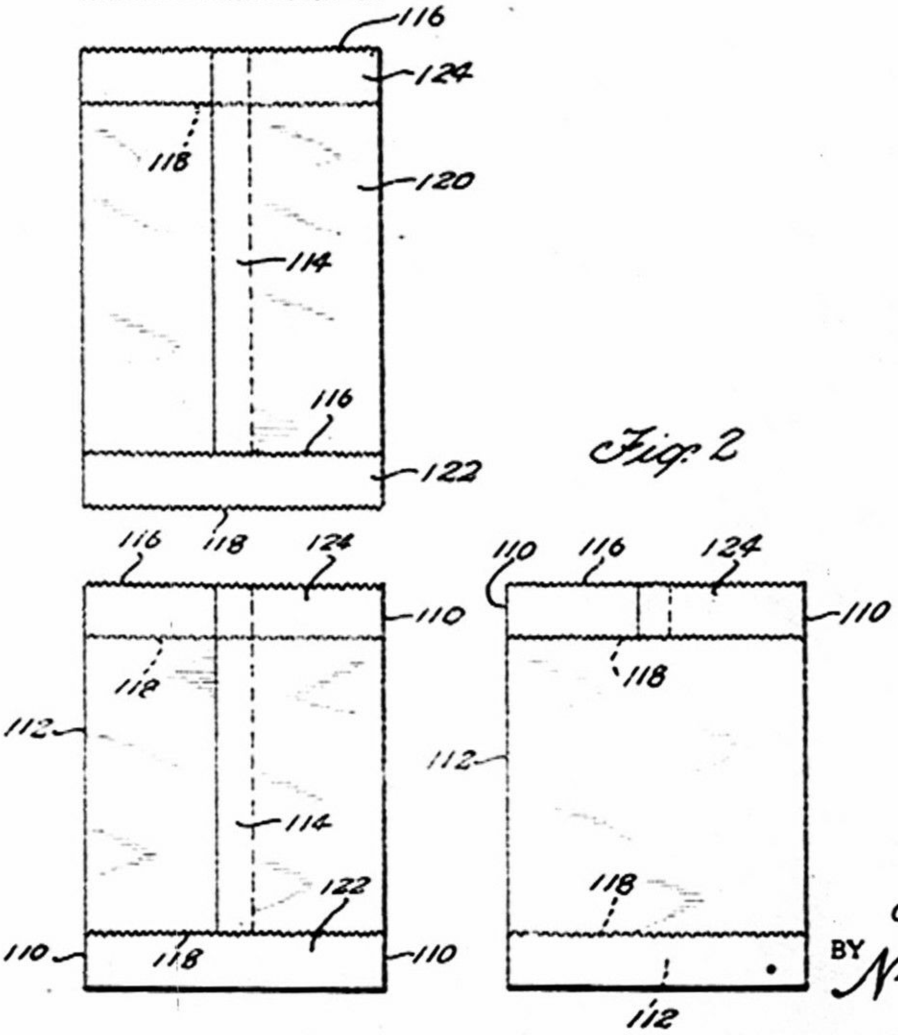


Fig. 2

INVENTOR
GEORGE W. POPPE
BY Nowell & Spencer
ATTORNEY

49

435844

2-2

6035. Equitable Paper Bag Co; Inc.

vs.

Thomas E. Robertson, Commissioner of Patents.

Fig. 3

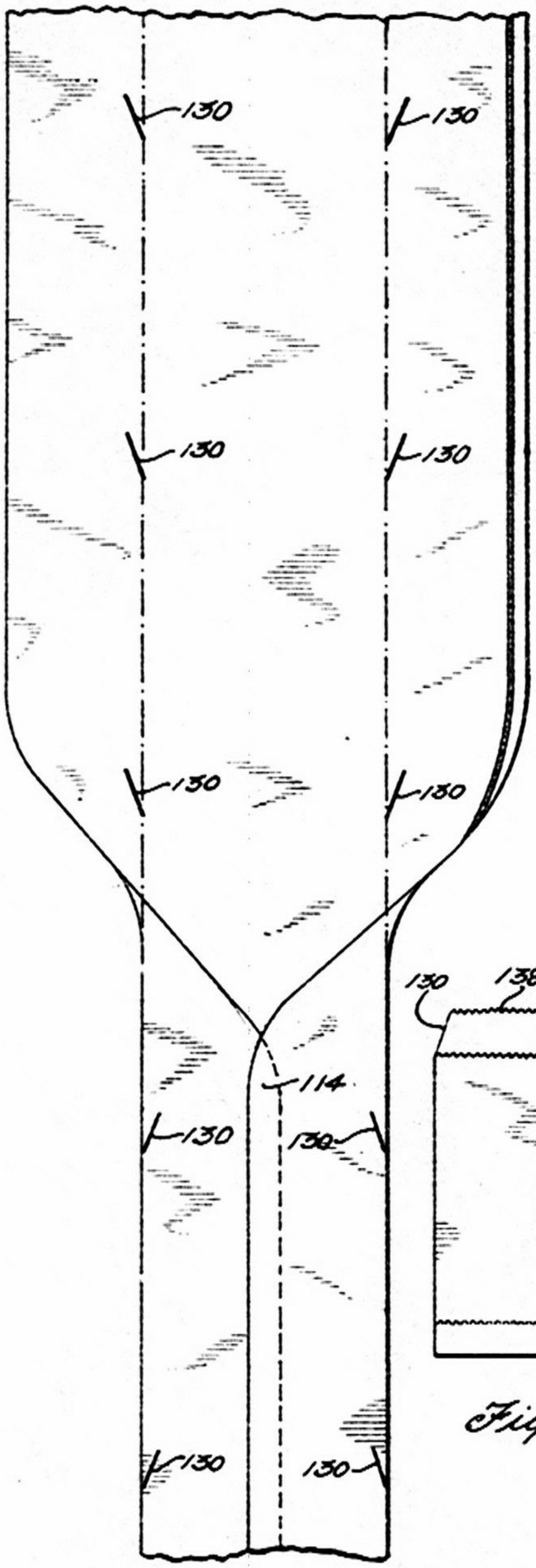


Fig. 4

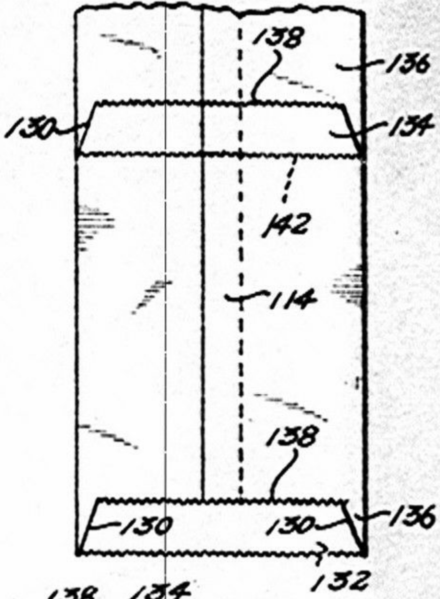
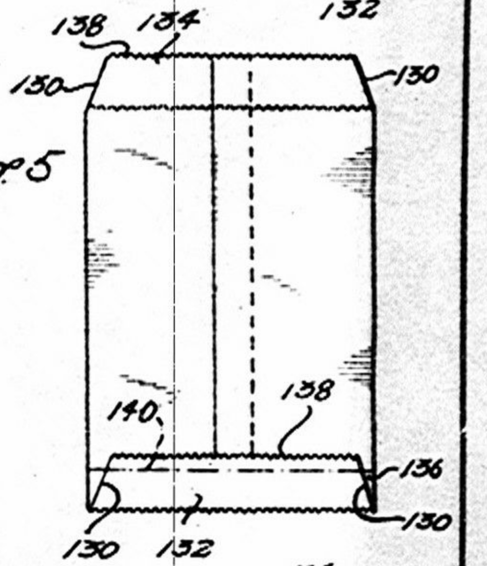


Fig. 5



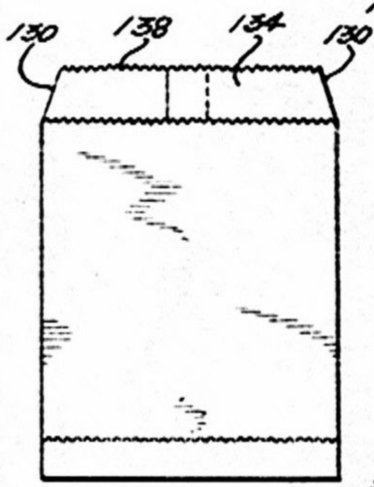


Fig. 7

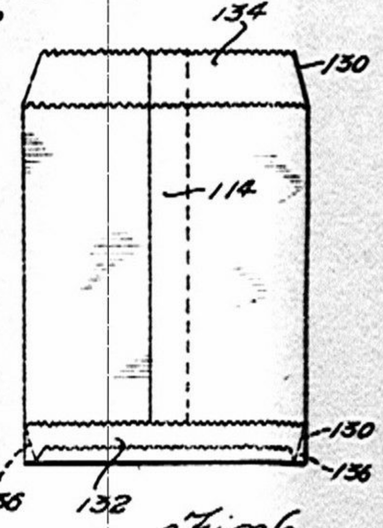


Fig. 6

INVENTOR
GEORGE W. POPPE
BY
Newell Spencer
ATTORNEYS.

March 31, 1931. **G. W. POPPE** **1,798,168**

PROCESS AND MACHINE FOR MAKING PAPER BAGS

Filed Nov. 1, 1928 5 Sheets-Sheet 1

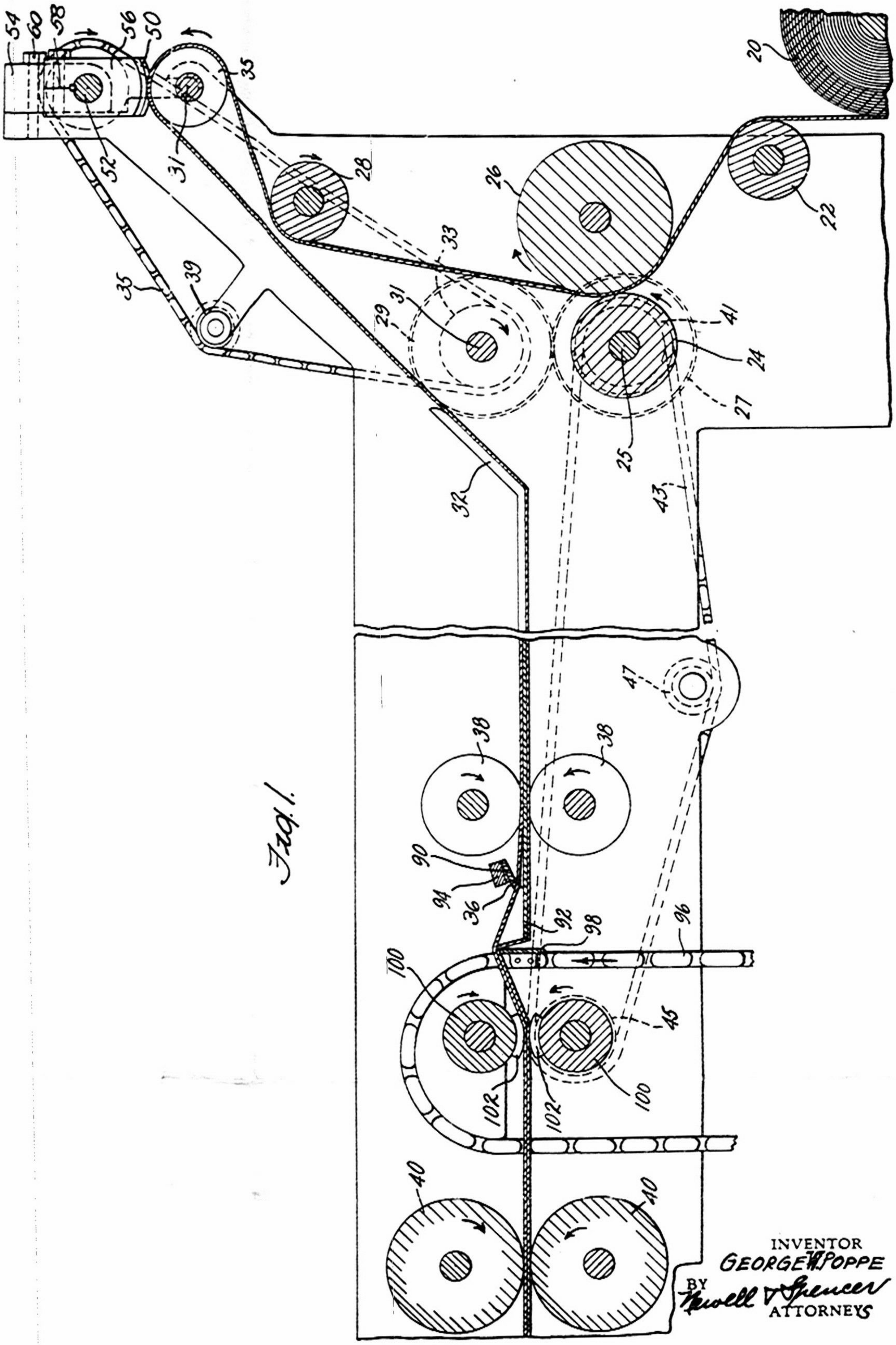


Fig. 1.

INVENTOR
GEORGE W. POPPE
BY Newell & Spencer
ATTORNEYS

March 31, 1931. G. W. POPPE 1,798,168

PROCESS AND MACHINE FOR MAKING PAPER BAGS

Filed Nov. 1, 1928 5 Sheets-Sheet 2

Fig. 3.

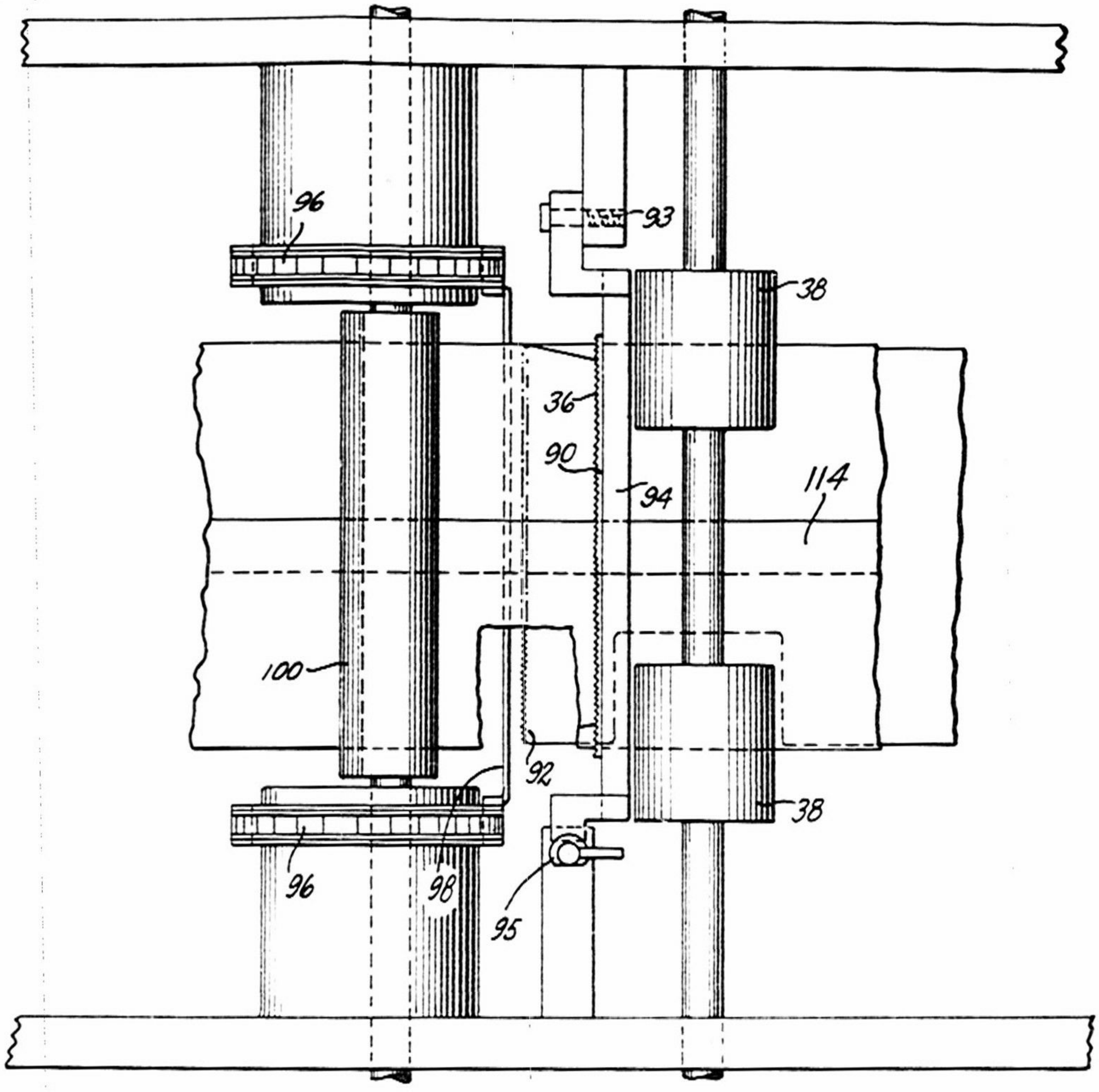
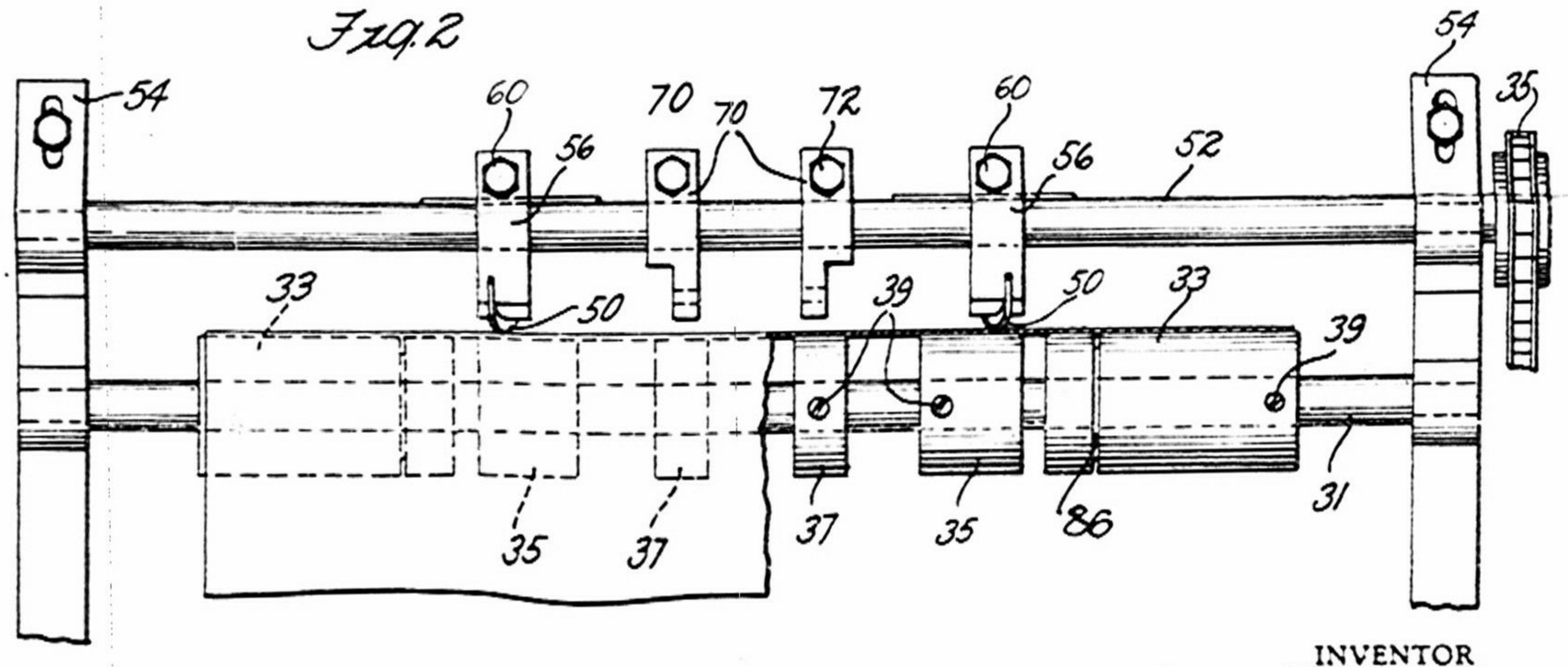


Fig. 2



INVENTOR
GEORGE W. POPPE
BY
Newell & Spencer
ATTORNEYS

March 31, 1931. G. W. POPPE **1,798,168**

PROCESS AND MACHINE FOR MAKING PAPER BAGS

Filed Nov. 1, 1928 5 Sheets-Sheet 3

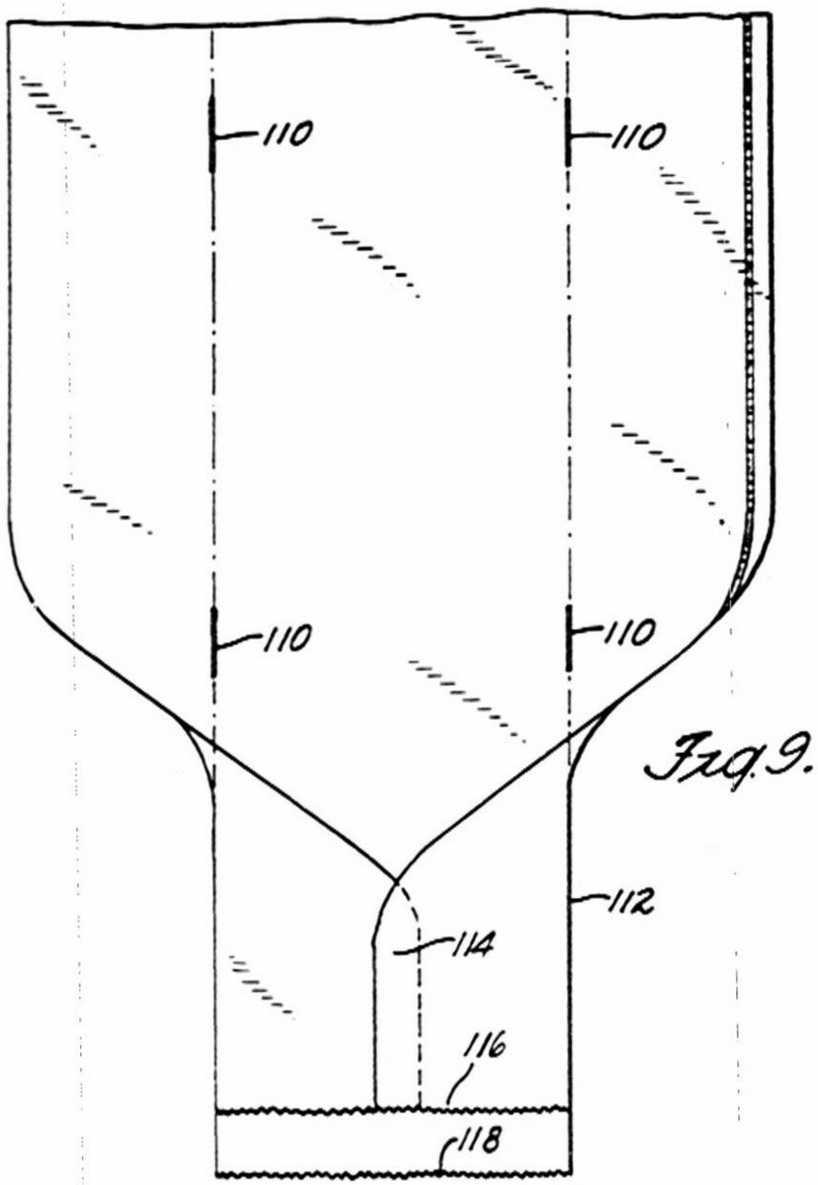


Fig. 9.

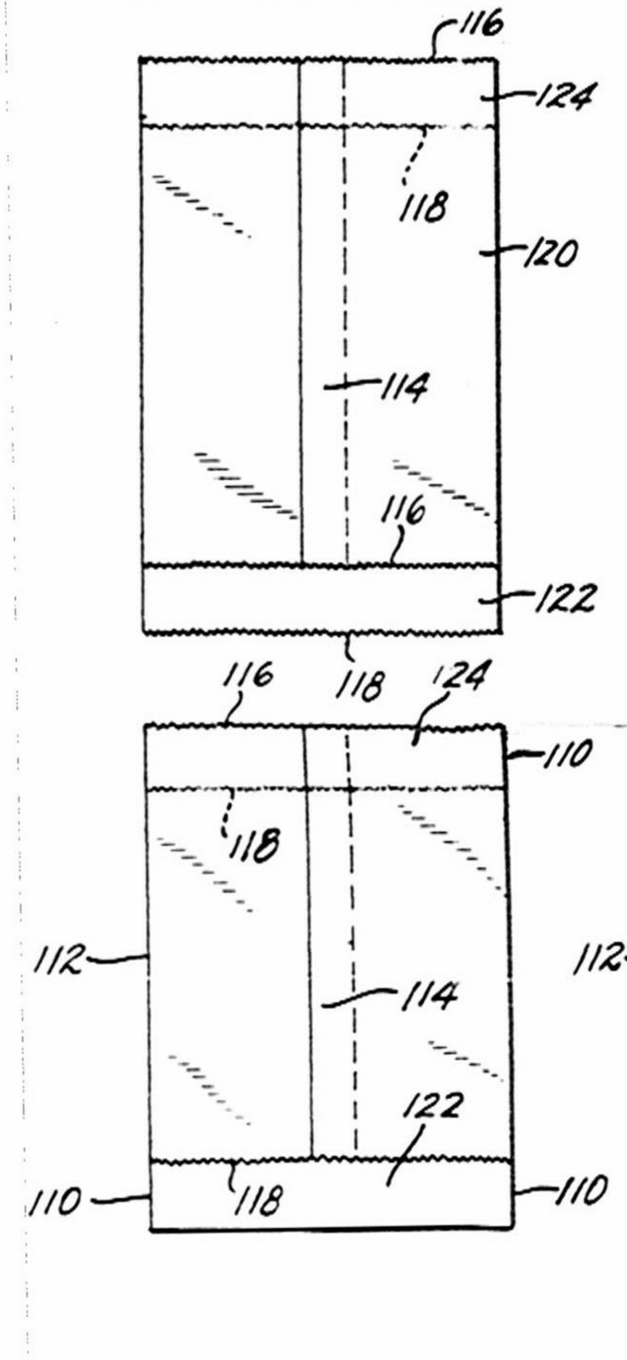


Fig. 10

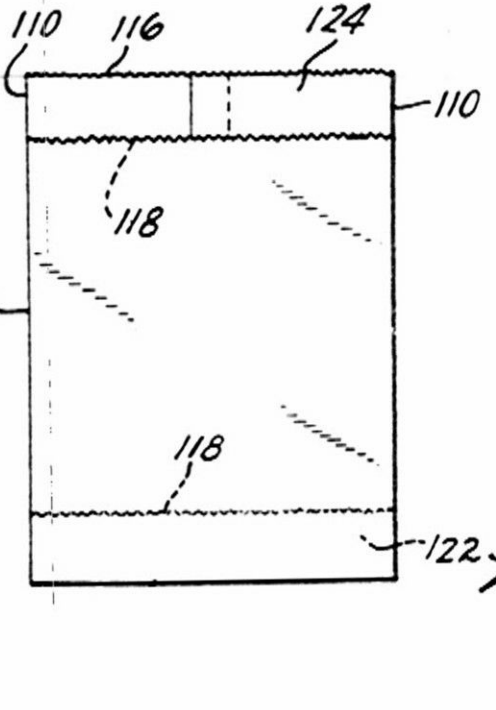


Fig. 4

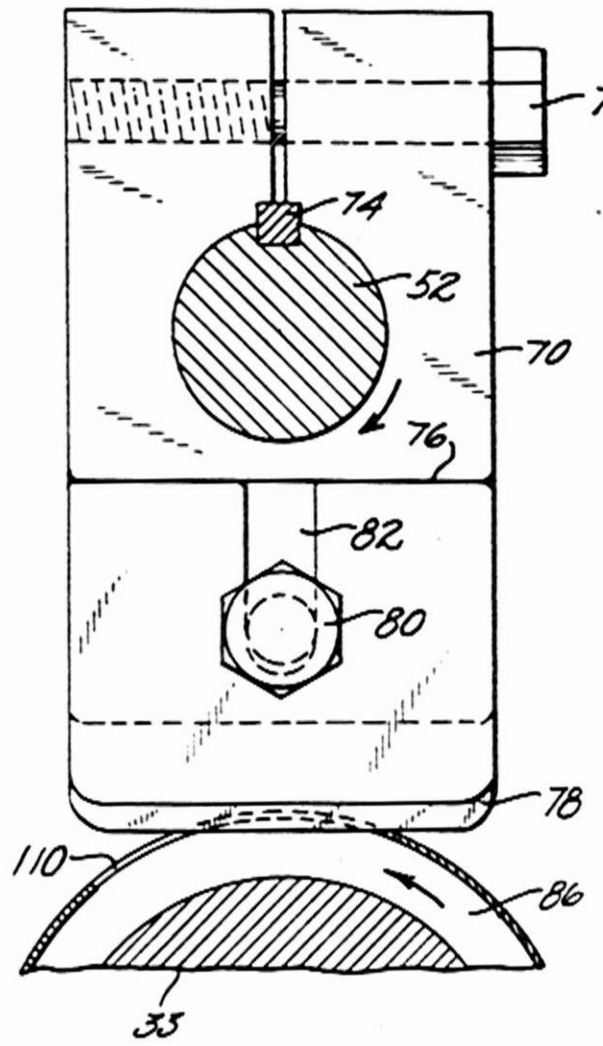
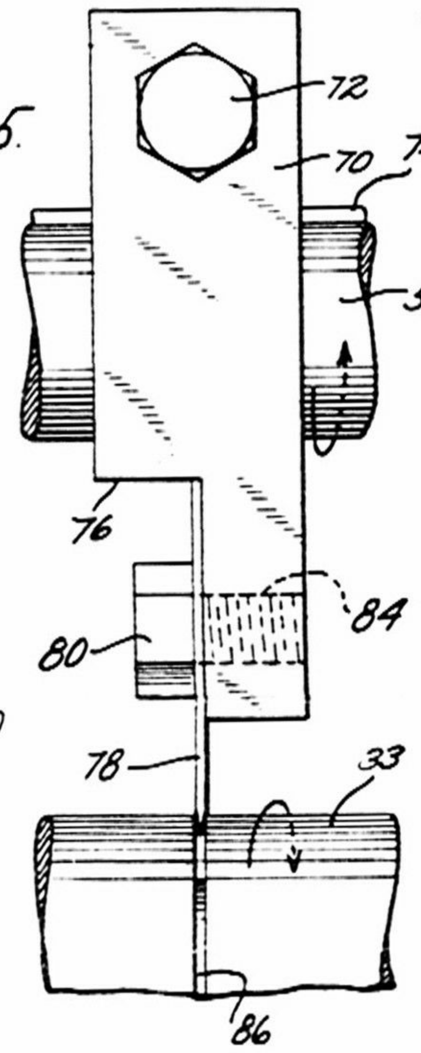


Fig. 5.



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March 31, 1931. G. W. POPPE **1,798,168**

PROCESS AND MACHINE FOR MAKING PAPER BAGS

Filed Nov. 1, 1928 5 Sheets-Sheet 4

Fig. 6

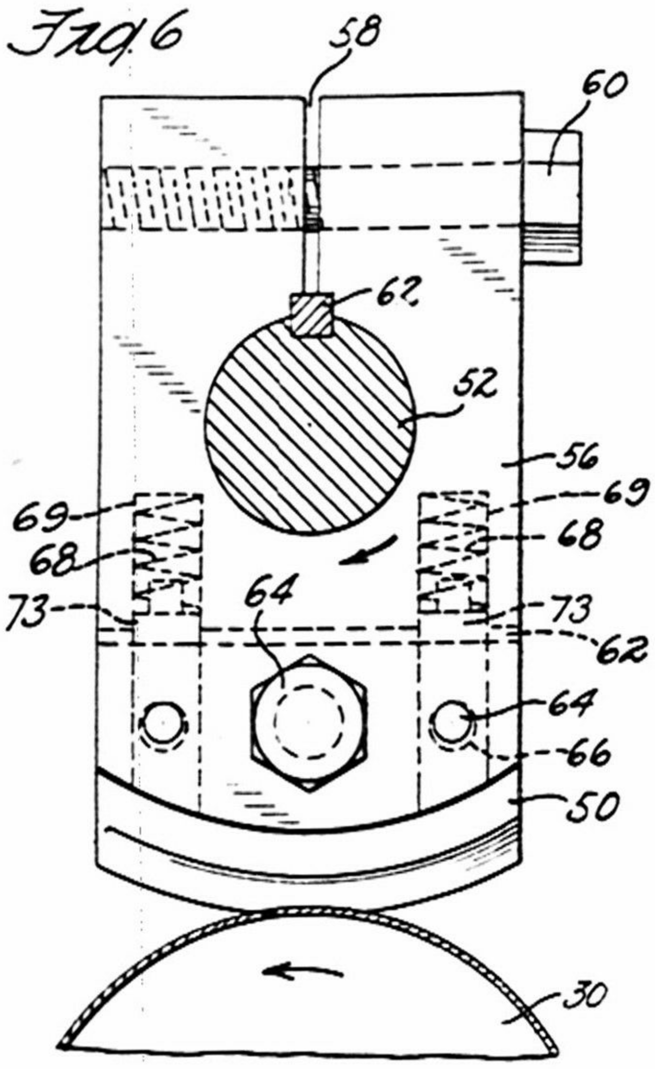


Fig. 7.

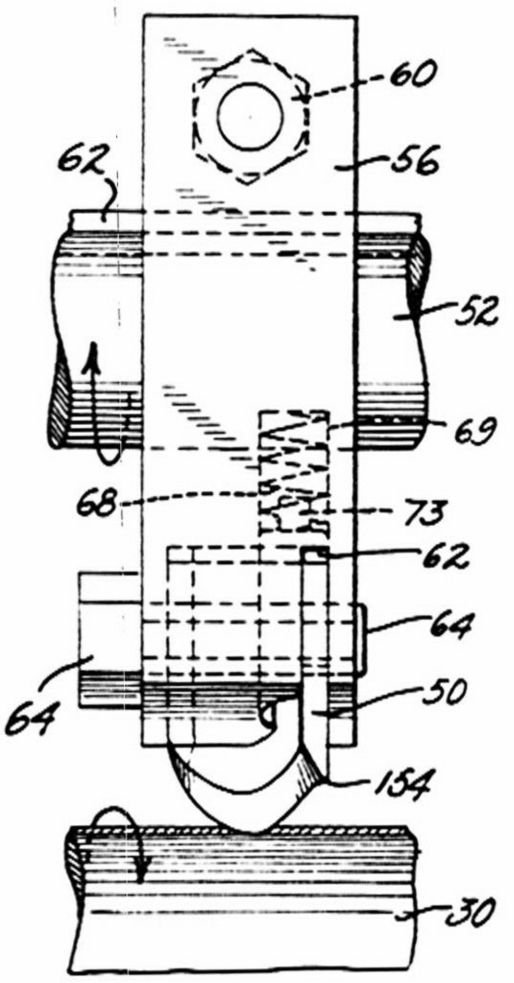


Fig. 8

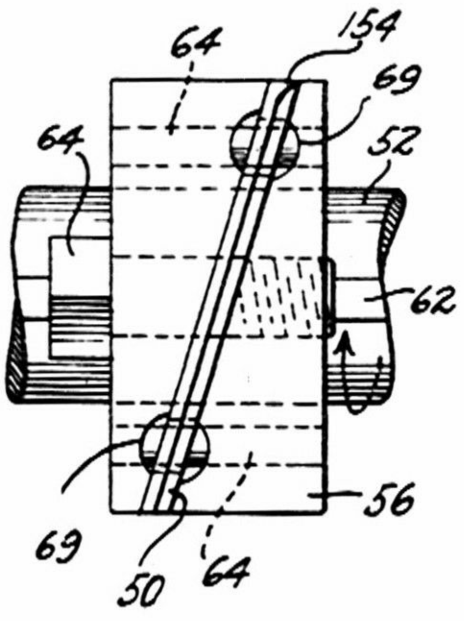


Fig. 16.

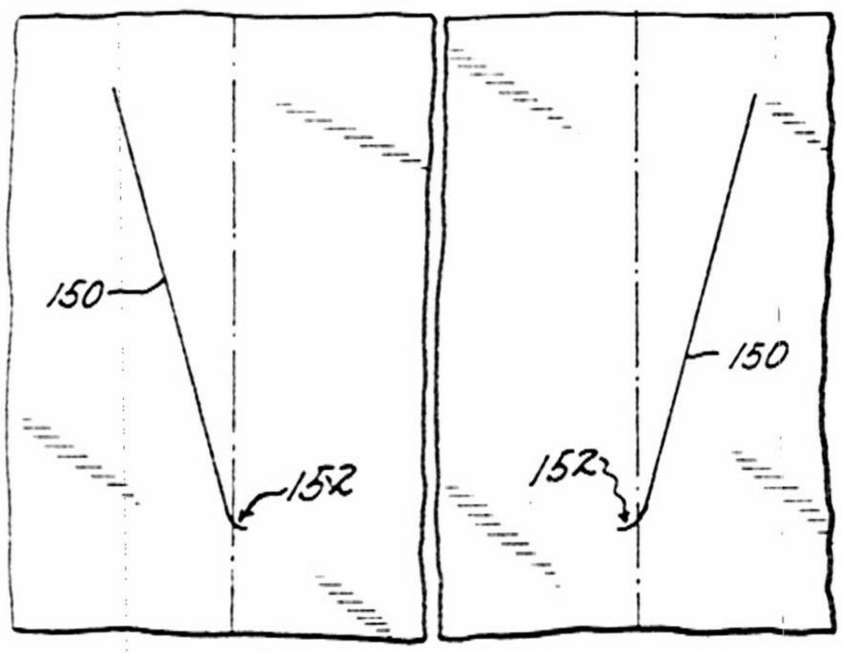
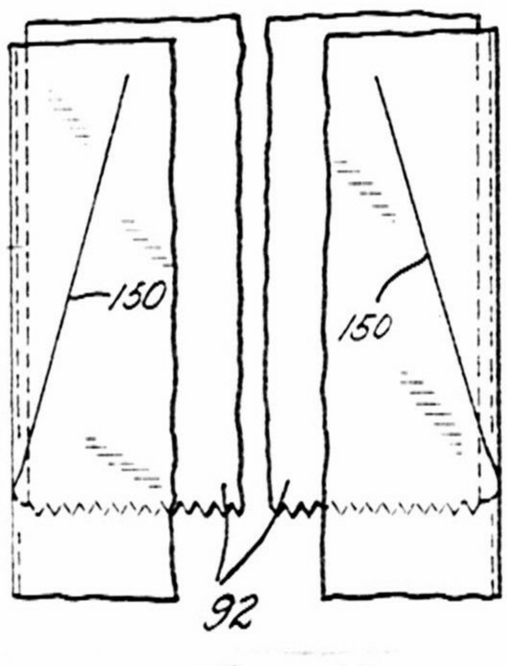


Fig. 18



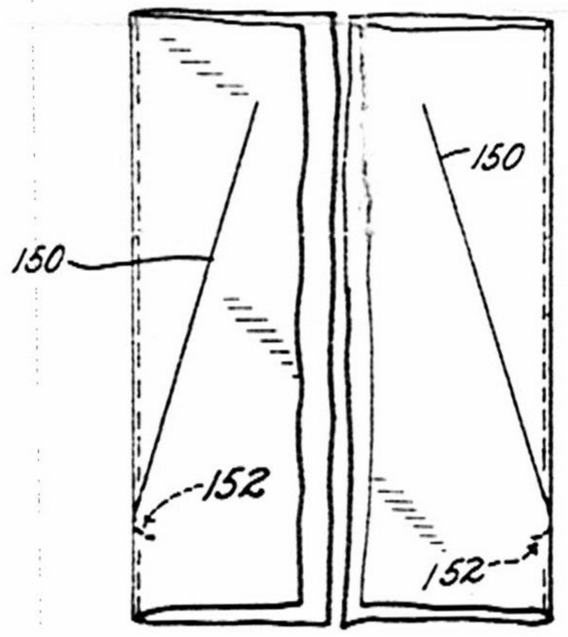
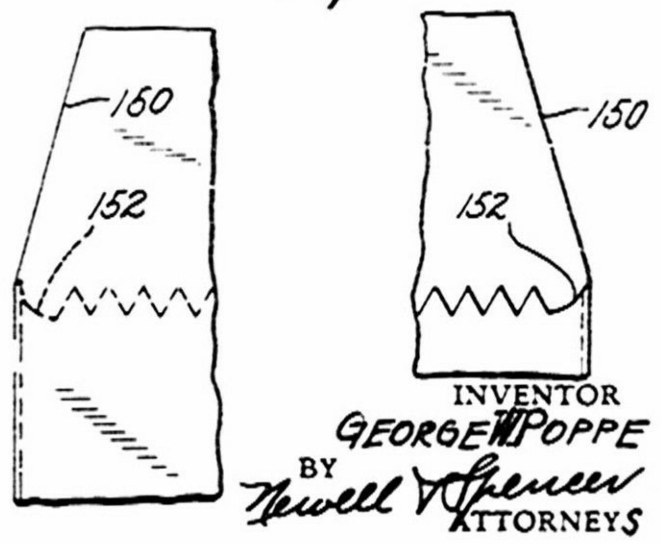


Fig. 17

Fig. 19.



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March 31, 1931. G. W. POPPE **1,798,168**

PROCESS AND MACHINE FOR MAKING PAPER BAGS

Filed Nov. 1, 1928 5 Sheets-Sheet 5

Fig. 11

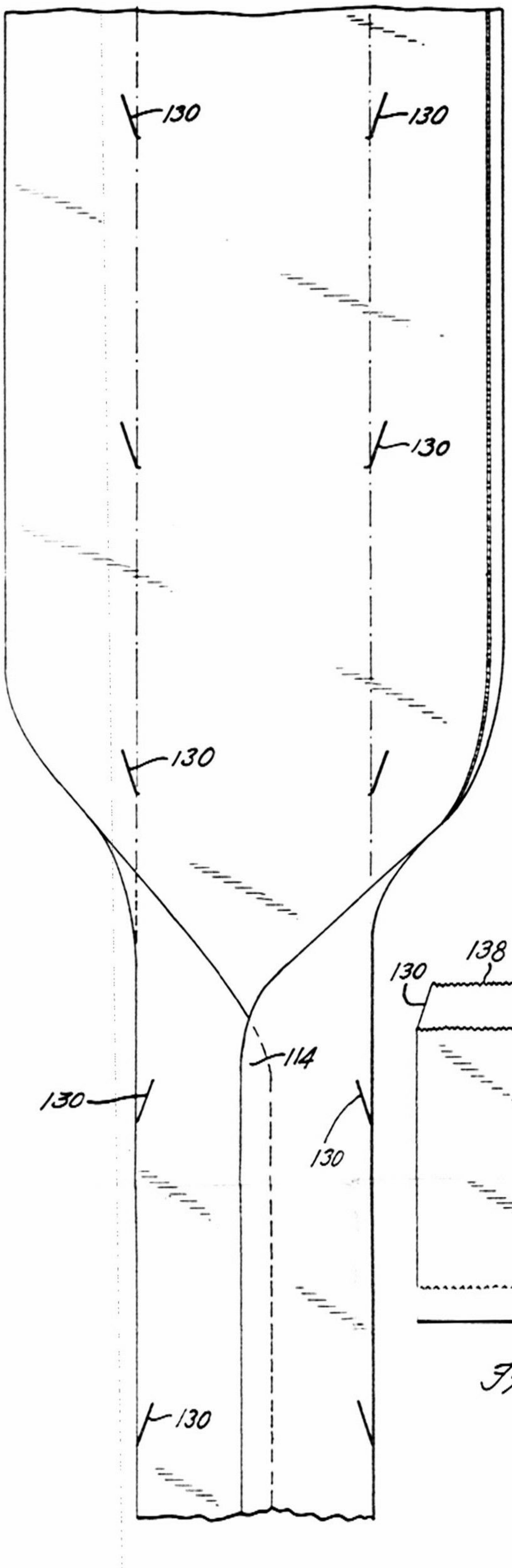
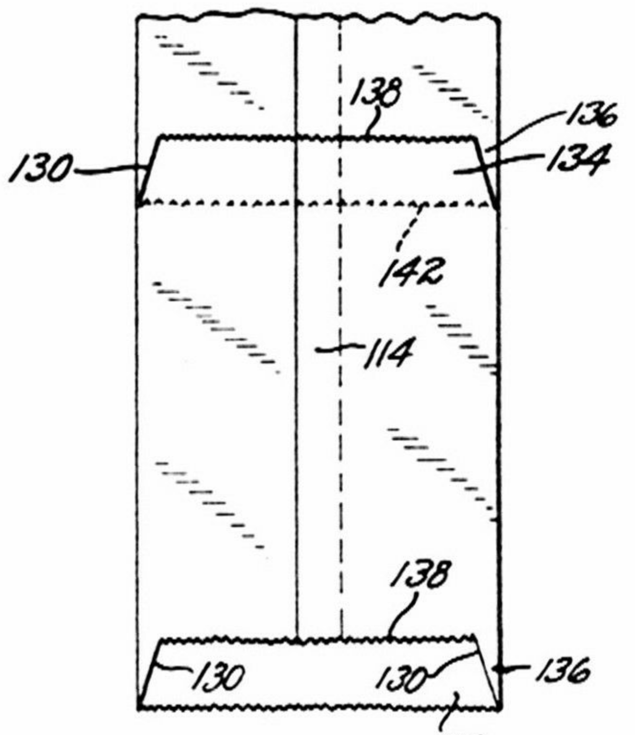


Fig. 12



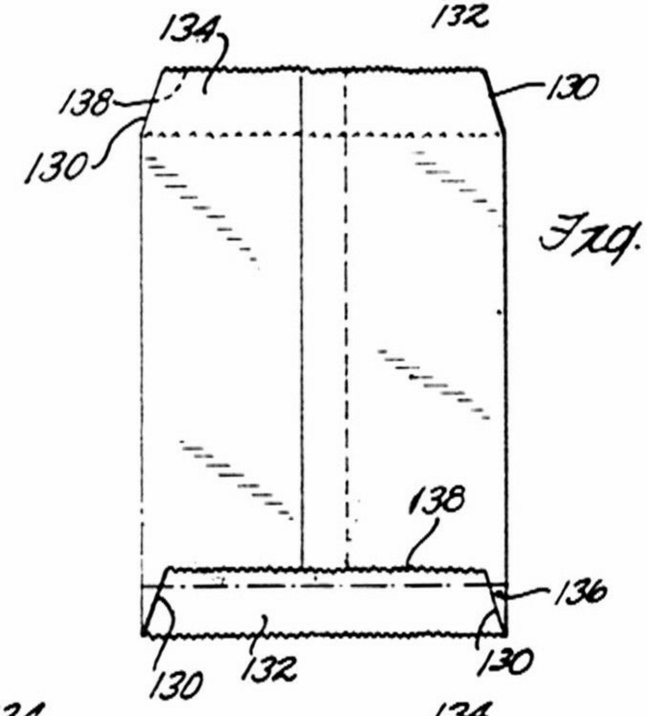


Fig. 13.

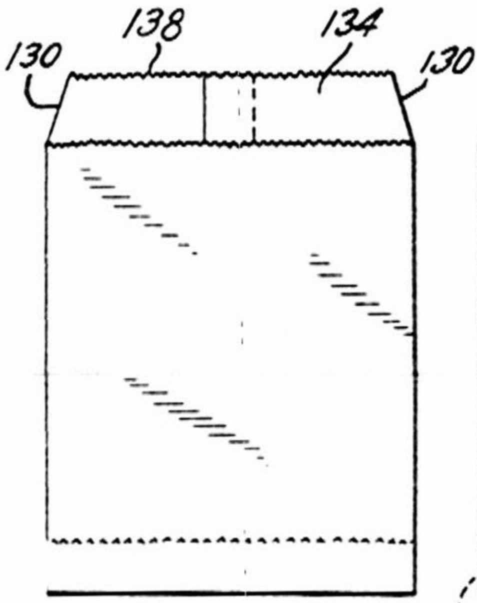


Fig. 15.

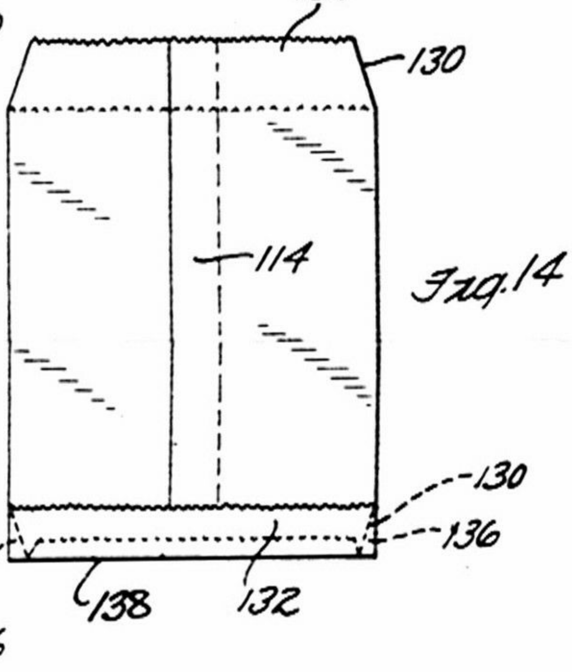


Fig. 14

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UNITED STATES PATENT OFFICE

GEORGE W. POPPE, OF BROOKLYN, NEW YORK, ASSIGNOR TO EQUITABLE PAPER BAG CO., INC., A CORPORATION OF NEW YORK

PROCESS AND MACHINE FOR MAKING PAPER BAGS

Application filed November 1, 1928. Serial No. 316,462.

The present invention pertains to new and useful improvements in receptacles made of paper, and more specifically the invention includes a new and improved paper bag of the type having a closing lip or flap and to a new and novel machine and method of manufacture thereof.

In the practical art of bag manufacture a distinction is made between what are known as bags and what are known as envelopes, due to the process and machines for making the two separate types of receptacles. Envelopes, in the practical art, are formed in such a way that the flaps closing the envelope are a continuation of the web from which the envelope is formed but both flaps fold on the same side of the completed article.

Paper bags, on the other hand, are formed by folding a web of paper longitudinally to form a tube-like structure which is severed into predetermined lengths to form a bag, one flap of which is a prolongation of the upper portion of the tube-like structure while the other flap is a prolongation of the other or opposite portion. In such a bag the free or closing flap contains a portion of the seam due to the fold.

The severing of the paper bags from the tube-like structure is accomplished by a so-called chopping action which consists in holding the tube-like structure under tension and in engagement with the cutting edge of suitably arranged knives in which position the tube-like structure is subjected to a sudden blow, the impact of which serves to sever it along its line of engagement with the knives.

So far as I am aware, in all bags of the type above mentioned the outer edge of the closing lip or flap is continuous and when the closing lip or flap is folded to bag-closing position it does not sufficiently overlap the body of the bag corners to afford the necessary protection to the bag contents, nor do such bags present as good an appearance as when the flaps are longer, as in envelopes. Bags of this type therefore cannot be used for containing articles which it is desired to protect from dust, etc., since dust finds its way to the interior of the bag through the portions of the bag mouth which are not always completely closed by the closing lip or flap.

It has heretofore been the practice when it is desired to protect articles from dust, etc. to use envelopes in which the closing lip or flap forms an effective dustproof closure. Receptacles of this type, however, are expensive due to waste incident to their method of manufacture and to the relatively slow operation of the machines by which they are made and the cost of these envelopes, which is considerably greater than that of paper bags, prohibits their use except for certain types of merchandise.

It is one of the objects of the present invention to provide a paper bag having a closing flap of the same length and similar in shape to that of an envelope, but which can be produced as rapidly as an ordinary paper bag.

It is a further object of the invention to provide a novel mechanism for use in connection with standard machines for forming paper bags of the closing lip type, whereby the new and improved bag may be formed on such machines without in any manner affecting the operation of the machine.

With the above and other objects in view which will appear as the nature of the invention is better understood, the invention consists broadly in slitting die-cutting a web of paper at oppositely disposed points in the width thereof, and at predetermined intervals in the length thereof, suitably folding the web to form a substantially tube-like structure and subsequently subjecting the folded tube-like structure to the aforementioned chopping operation to sever it transversely along lines which meet the ends of the slits. Forming paper bags in the above described manner provides a closing lip or flap for a bag, of the same desirable type heretofore employed in envelopes and which, when folded to closing position forms a complete closure for the bag which is effective against the entrance of dust and undesirable foreign matter.

While in the present illustration of the invention, the slits or cuts formed in the web are positioned at an angle of approximately

20° to the longitudinal axis of the web, this angle may be increased or decreased as desired and in some instances the slits may be formed parallel to the longitudinal axis of the web. Furthermore the slits may be formed either by a so-called slitting mechanism or they may be die-cut, and it is to be understood that the invention is not limited to any precise angle of slits or to any particular manner of forming them.

With the above and other objects in view, the invention consists in certain novel features hereinafter described, and particularly pointed out in the claims, the advantages of which will be readily understood and appreciated by those skilled in the art to which the invention pertains.

The invention will be clearly understood from the accompanying drawings which illustrate the invention in a preferred form, and the following detailed description of the construction therein shown.

In the drawings—

Figure 1 is a longitudinal sectional view of a paper bag machine showing the mechanism for carrying out the present invention attached thereto;

Figure 2 is a detail view in elevation of one type of attachment for forming the slits in the paper web;

Figure 3 is a plan view of the chopping mechanism of a known type of paper bag machine;

Figure 4 is a detail view partly in section of a slitting mechanism;

Figure 5 is a similar view taken at right angles to Figure 4;

Figure 6 is a detail view partly in section of a form of a die cutting mechanism;

Figure 7 is a similar view taken at right angles to Figure 6;

Figure 8 is a detail bottom plan view of the die cutting mechanism shown in Figures 6 and 7;

Figure 9 is a plan view of a web of paper, said view showing the manner in which the web is folded longitudinally and also showing the web formed with straight slits parallel to its longitudinal axis, and severed transversely into bag lengths;

Figure 10 is a reverse face view of a bag length formed in accordance with the showing of Figure 9;

Figure 11 is a plan view of a web of paper similar to that shown in Figure 9 except that the slits are formed at an angle to the longitudinal axis of the web;

Figure 12 shows the manner in which a bag length is severed from the folded web;

Figure 13 is a view of a severed bag length;

Figures 14 and 15 are reverse face views of a completed bag;

Figure 16 illustrates another type of slit formed in the web;

Figures 17 to 19 inclusive illustrate the manner in which a paper bag is formed from a web of paper slit in accordance with the showing of Figure 16.

It is to be understood that the process of making my improved bag may be carried out in different ways. I have, however, for purposes of illustration, shown the invention as being performed with a bag machine of usual construction, which known machine is suitably modified to enable it to be used to produce my improved bag.

Before describing the new parts in detail, brief mention will be made of the more important parts of a known bag machine. Referring to Fig. 1, the paper from which the bags are formed is fed as a web from a roller 20 over a guide roller 22 and between rollers 24 and 26 which may be feed rollers, but sometimes these rollers carry printing devices for printing suitable matter on the web of paper at such distances apart that it properly appears on each finished bag. The web then passes over a guide roller 28 and around a roller mounted on the shaft 31.

For the purpose of the present invention this roller is modified but in the usual machine such roller may be and frequently is an ordinary roller which serves to reverse the direction of the paper and deliver it to the folding and forming mechanism 32, whence it passes through the feed rollers 38 to the chopping mechanism designated generally by 36. This chopping mechanism severs the folded web transversely into bag lengths. The bag then passes on to folding and pasting mechanism not shown, which operate to fold over the bottom flap of the bag and paste it in the usual way.

In the process of making my improved bag the paper web is slit or die-cut at suitable intervals prior to the folding operation, said slits forming the edges of flaps in the finished bag. The means for doing this and other changes in the known form of bag making machine, whereby a bag is made according to my new process, will now be described.

In Figure 1 of the drawings, the mechanism employed for forming the slits in the paper web is of the type known in the art as a die cutter and it comprises a pair of knives 50 secured to a shaft 52. Bearings 54 support the shaft 52 and said bearings are of a type which permits of adjustment of the shaft.

Each knife 50 is carried by a block or the like 56, see Figures 6 to 8, these blocks being preferably split as at 58 and secured to the shaft 52 by means of a bolt 60 and a key 62. The blocks 56 are slotted as at 63 and the knives are slidably mounted in these slots, they being held therein by bolts, or similar means 64 which are carried by the blocks and which pass through openings 66 in the knives 50. It will be noted that the openings 66 in the knives 50 are slightly larger than th bolts 64 which construction permits of slight movement of each knife 50 relative to the block by which it is carried. For the purpose of yieldingly mounting the knives, springs 68 are employed to force the knives outwardly of their blocks, said springs being mounted in recesses 69 in the blocks. Interposed between each spring and its respective knife there is a follower 73 which serves to transmit the pressure of the spring to the knife and thereby yieldingly maintain the knife extended into cutting contact with the surface of rollers 35 mounted on shaft 31. By mounting the knife in the above-described manner sufficient pressure to properly cut the paper is obtained, and injury to the cutting edge of the knife by contact with the surface of the rollers 35 is prevented. By reference to Figures 6 to 8 of the drawings, it will be noted that the knives 50 are positioned at an angle with respect to their rotary path of travel and by this arrangement of the knives, the slits are formed in the web of paper at an angle to the longitudinal axis thereof which produces a closing lip for the finished bag, the end edges of which are angular, as in the form of bag shown in Figures 11 to 15 inclusive. It is to be understood that the angle at which the knives are positioned may be varied to produce any angle desired for the end edges of the closing lip.

As shown in Figure 2, the roller which in the usual machine is mounted on the shaft 31 is in the present invention replaced by a roller of the sectional type which, and preferably comprises end sections 33 and two pairs of intermediate sections, one pair of said intermediate sections being designated by the reference numeral 35, the other pair being designated by the reference numeral 37. These roller sections 33, 35 and 37 are adjustably carried by the shaft 31, and are secured thereon in their adjusted position by means of set screws 39. By this construction, it is readily apparent that the several sections of the roller together with the knives 50 may be adjusted to form slits in the web of paper at the proper distance apart transversely of the web.

It will be noted from Figure 2 that in addition to the blocks 56 which carry the knives 50, the shaft 52 also carries a plurality of blocks 70. The specific construction of these blocks is shown in Figures 4 and 5 by reference to which it will be seen that each block is secured to the shaft 52 by means of a bolt 72 and a key 74. Each block is preferably cut out as at 76 and mounted in this cut out portion each block carries a knife 78. Each knife 78 is adjustably secured to its respective block by means of a bolt 80 which passes through a slot 82 in the knife, and has threaded engagement with the block as at 84. As shown in Figure 4, these knives are straight as distinguished from the knives 50 heretofore described and as shown in Figure 5, these knives 78 operate in peripheral grooves 86 in the end sections 33. This last described construction is known in the art as a slitting mechanism and its principal use in connection with the present invention is for forming straight slits in the paper web such as are shown in Figures 9 and 10 in the drawings.

The aforementioned chopping mechanism 36 preferably consists of two knives 90 and 92 which extend transversely of the machine as more clearly shown in Figures 1 and 3. The knife 90 is carried by a suitable support 94 arranged in such a manner that the knife occupies a slight angular position with respect to the travel of paper through the machine. The support 94 is pivotally secured at one end as at 93 to the machine, its other end being engaged by a suitable latch by means of which the support is held during operation against movement about its pivotal point. Loosening the latch 95 permits of swinging the support 94 about its pivotal point 93 for the purpose of clearing the machine should it become choked at this point. The knife 92 occupies a position which is parallel to the travel of paper through the machine and is positioned beyond the knife 90 as shown in Figure 1.

Suitably mounted on each side of the machine is an endless belt 96 and connecting these belts there is a transversely-extending bar 98. This bar 98 moves upwardly through the machine in proximity to the knife 92 and imparts a sharp upward blow to the folded paper web, the impact of which serves to sever the web transversely along its lines of engagement with both knives 90 and 92.

For proper operation of the chopping mechanism, the folded paper web should have a certain amount of slack therein when engaged by the chopper bar 98, and to provide this slack, pinch bars 100 are employed. These pinch bars each have a projection 102 and the folded paper web is gripped between these projections 102 as they come together as shown in Figure 1, it being understood that the pinch bars 100 are rotated at a speed which slightly retards the movement of the folded web of paper through the machine when it is gripped by the projections 102.

The feed roller 24 is mounted upon a shaft 25, and carried by this shaft in such a manner that it is rotated therewith, there is a gear 27. This gear 27 drives a gear 29 suitably mounted as at 31. Driven by the gear 29 there is a sprocket wheel 33 around which a driving chain 35 passes. This chain 35 also passes around a sprocket 37 mounted upon the shaft 52 and said shaft is rotated by the driving chain 35 which in turn is driven by the gears 27 and 29 and the sprocket 33. The driving chain 35 also passes around an adjustable idle sprocket 39 by means of which any slack in the chain 35 due to wear or adjustment of the shaft 52 may be taken up.

Mounted on the shaft 25, there is a sprocket 41 around which a chain 43 passes, and this chain 43 also passes around a sprocket 45 carried by the lower pinch bar 100. This chain 43 serves to drive the lower pinch bar 100, the upper pinch bar being driven from the lower pinch bar in any desired manner. For the purpose of taking up slack in the driving chain 43, an adjustable idle sprocket 47 is employed and is suitably mounted in frame of the machine.

Referring now to Figures 9 and 10, a description of one type of bag formed in accordance with the present invention will be given. The paper web is fed through the machine as heretofore described and as it passes around the roller 30 the paper web is provided with slits 110 at proper intervals in its length to form the size of bag desired. These slits 110 are parallel with the longitudinal axis of the web and are formed by the heretofore described slitting mechanism illustrated in detail in Figures 4 and 5. The paper web is then passed to the folding mechanism where it is folded upon the lines 112 in such a manner that the free edges overlap as indicated at 114 to form the bag body. After the web has thus been folded to form a tubular structure it is passed onto the chopping mechanism heretofore described where it is severed transversely along the lines 116 and 118 by the knives 90 and 92 respectively. After the tubular structure has been severed by the chopping mechanism a bag length such as 120 results. This bag length is provided on each end with a flap, the flap on one end being a prolongation of one side of the bag body, while the flap on the other end is a prolongation of the opposite side of the bag body, this result being obtained by the position of the knives of the chopping mechanism. In Figure 9 these flaps are designated by the reference numerals 122 and 124. To complete the bag one of two flaps, preferably the flap 122, is folded over into engagement with the body portion of the bag and is permanently secured thereto by a suitable paste, it also being understood that the overlapping portions 114 of the bag body are also permanently secured together, preferably by means of paste. The flap 124 which may be called the free flap is employed for closing the bag when in use and this flap may or may not be provided with a gum or other suitable adhesive by which it may be retained in its bag-closing position.

From the foregoing it will be apparent that when the free flap 124 is folded over to close the bag owing to the shape of the flap and the manner in which it is formed a dust-proof closure is had, it being understood that the flap is folded transversely along its base line.

In Figures 11 to 15 inclusive is shown a slightly different type of bag in which the paper web is formed with slits 130 at equally distantly spaced intervals as it passes around the roller 30. These slits 130 are angularly disposed with respect to the longitudinal axis of the web and are formed by the die-cutting mechanism heretofore described and illustrated in Figures 6 to 8 inclusive. After the web is so formed it is folded in the manner heretofore described to form a tubular structure with overlying edges 114. This tubular structure is now subjected to the action of the chopping mechanism and severed into bag lengths such as shown in Figures 12 to 15 inclusive. It will be noted by reference to Figures 12 to 15 that the bag lengths have a flap at each end thereof and said flaps, as in the heretofore described bag lengths are a prolongation of the opposite sides of the bag length. In Figures 12 to 15 these flaps are designated by the reference characters 132 and 134. It will be noted that when the web is slit and folded as shown in Figure 11 and subsequently severed into bag lengths as shown in Figures 12 to 15, the side wall of each bag length opposite the flap 132 will be formed with a side wing portion 136 which serves to entirely close the bottom end of the bag length when the flap 132 is folded along the line 138. The free flap 134 of each bag length has angular end edges 130 which extend from the outer or free edge of the flap entirely to the base of the flap. When this flap 134 is folded over to close the bag in use the fold is made along the line 142 and owing to the end edges of the closing flap 134 extending clear to the base of the flap 134 or in other words, to the line of fold 142, a complete and dust-proof closure at the corners of the bag body is had.

In Figures 16 to 19 inclusive is shown a slightly modified form of the invention and in this form the slits such as 150, which are formed in the web of paper, are provided at their ends with curved portions 152. These curved portions may be formed preferably by slightly curving the knife as at 154, as shown in Figure 7 of the drawings and the purpose of thus forming the slits is to prevent a ragged edge known in the art as a "tatter" which often occurs at the juncture of the side fold and the transverse cut of the chopping mechanism and is due to the knives of the chopping mechanism not accurately coinciding with the ends of the slits. This may also result from an inaccurate folding of the web with respect to the slits 150 formed therein and therefore by extending the ends of the slits inwardly of the web so that they extend slightly beyond the longitudinal line of fold, all possibility of tearing in such a manner as to produce the so-called "tatter" is obviated. Another advantage resulting from this form of cut is that when the lip of the bag is folded over small gussets are produced at the bag corners thereby more effectually protecting the bag contents from dust.

From the foregoing it will be apparent that the present invention provides a new and improved paper bag in which the closing flaps or lips are so constructed as to assure at all times a dust-proof closure for the bag and furthermore the invention provides a new and improved method for manufacturing bags of this character and a new and improved machine for carrying out the new and improved method. It is to be understood that the invention is not limited to the particular illustrated embodiments herein but that the inventions may be produced in such other forms as rightfully fall within the scope of the claims hereto annexed.

What is claimed as new is:

1. The method of making an envelope bag, which comprises taking a bag tube, which tube has longitudinal cuts at intervals in the length thereof, and severing both walls of the tube along lines which connect both ends of the cuts.

2. The method of making an envelope bag from a web of paper having longitudinal cuts at intervals in the length thereof, which comprises folding the web to form a tube, and completely severing the walls of the tube along lines which connect both ends of the cuts.

3. The method of making envelope bags which comprises making cuts in a web of paper at substantially bag length intervals along the length thereof, said cuts separated transversely a distance corresponding to the width of the closing flap in the finished bag, folding said web to form a bag tube having front and rear walls and subsequently completely severing both walls of the bag tube along lines which connect the respective ends of the cuts.

4. The method of making envelope bags which comprises making cuts in a web of paper at substantially bag length distances along the length thereof, said cuts separated transversely a distance corresponding to the width of the free flap in the finished bag, folding said web to form a bag tube having front and rear walls and subsequently completely severing one tube wall along a line connecting the cuts at one end thereof and the other tube wall along a line connecting the other ends of the cuts.

5. The method of forming paper bags which comprises cutting a web of paper to provide relatively short transversely spaced slits at equi-distantly spaced intervals in the length thereof, folding said web of paper to provide a front wall and a rear wall in the finished bag, severing both walls of the longitudinally folded web transversely along lines which meet both ends of the slits, and subsequently closing one end of the severed portion.

6. The method of forming paper bags which comprises cutting a web of paper to provide relatively short angularly disposed slits at equi-distantly spaced intervals in the length thereof, said slits being spaced apart transversely a distance substantially equal to the width of the finished bag, folding said web of paper to provide a front wall and a rear wall in the finished bag, severing both walls of the folded web of paper transversely along lines which meet both the ends of the slits, and subsequently closing one end of the severed portion.

7. The method of forming paper bags which comprises cutting a web of paper to provide relatively short slits at equi-distantly spaced intervals in the length thereof, folding said web of paper to provide a front wall and a rear wall in the finished bag, simultaneously severing the folded web of paper transversely at along lines which meet both the ends of the slits, and closing one end of the severed portion.

8. In a machine for making an envelope bag having a closing flap, the combination with the web-feeding and web-folding mechanisms thereof; of chopping knives for severing both walls of the bag tube, rotary cutters for making cuts in the web of paper prior to folding so spaced that the cuts form the sides of the closing flap of the finished bag, said chopping knives being separated from each other such a distance and the knives being of such length that the walls of the bag tube are severed by said knives along lines that meet both ends of the cuts.

9. The method of forming a bag from a web, comprising cutting slits in the web in oppositely arranged pairs spaced from the edges of the web, folding the edges of the web to form a tube, and cutting the tube by transverse cuts on opposite sides thereof, said cuts connecting the opposed ends of the slits.

10. The method of forming a bag from a web, comprising cutting slits in the web in oppositely arranged pairs spaced from the edges of the web at opposite sides of the center line of the web, folding the edges of the web to form a tube, cutting the tube by transverse cuts on opposite sides thereof, said cuts being out of register and connecting the opposed ends of the slits to form a tab at the end of the bag.

11. Apparatus for forming bags or the like, comprising a support for a roll of material, a slitter roll over which the material passes, diagonally arranged blades on the roll, a former, and means to draw the material over and warp it around the former to form a tube, the edges of the former, if extended, intersecting the blades.

12. A machine embodying the features of claim 11, together with transverse cutters to

sever blanks from the leading end of the tube.

13. Apparatus for forming bags or the like comprising a support for a roll of material, cutters for forming cuts in the material spaced inwardly from the edges thereof, said cuts being located angularly in respect of the general direction of the web, a former, means for drawing the web over the former to form a tube, and transverse cutters to cut both walls of the tube from opposite ends of the cuts.

14. Apparatus for forming bags or the like comprising a support for a roll of material, a former, means for wrapping the material about the former to make a tube, means for cutting both walls of the tube transversely to form individual blanks from the leading end of the tube, and means for forming cuts in the material running in a general longitudinal direction prior to making the transverse cuts, the transverse cuts meeting the opposing ends of the longitudinal cuts.

15. The process of making bags from a web without waste, comprising forming spaced pairs of slits in a web, folding the web along longitudinal lines which intersect the slits and cutting both walls of the tube by transverse cuts which connect both ends of the slits to thereby form a bag tube.

16. The process of making bags which comprises making cuts in a web of material, said cuts having curved ends, folding the web to form the bag tube and severing both walls of the tube along lines that meet opposite ends of the cuts.

Signed at New York, N. Y., this 31st day of October, 1928.

GEORGE W. POPPE.

Daily Machine Card

Department flat and square
Machine No. #2

Date 1-4-33

[illegible] 1/18/33 R.T.B.

PRODUCTION							Consump'n of Paper		Direct Labor			Lost Time					
Mach. Tndr. No.	Operator No.	Order No.	Grade	Size	Printed or Plain	Quantity	No. of Roll	Weight of Roll	Began	Finished	No. of Hours	Chang-ing	Repair	No Work	Waiting	Adj's	Adj's No.
72	91	✓	Manila	5½ x 8½	printed	14 000	1-	no	7⁴⁵	5³⁰						✓	35
			Brown	Env	R. H.	12 000	1-	weight								✓	62
			Grey	flag	Manila	12 000	1-	marked.									
			11¾ lb. 40		Captain	12 000	1-	✓									
					color Ink	14 000	1-	✓									
					red & blank	12 000	1-	✓									
					Senators	14 000	1-	✓									
						14 000	1-	✓									
						14 000	1-	✓									
						12 000	1-	✓									
						14 000	1-	✓									
						14 000	1-	✓									
						14 000	1-	✓									
				172		172 000											
				31													
				40	172												
				516	1				91		504						
				559	51				72		233						
					172												
					258												
					15												

Daily Machine Card

Department Flat and square
Machine No. #2

Date 1-3-33

PRODUCTION							Consump'n of Paper		Direct Labor			Lost Time					
Mach. Tack No.	Operator No.	Order No.	Grade	Size	Printed or Plain	Quantity	No. of Roll	Weight of Roll	Begun	Finished	No. of Hours	Changing	Repairs	No Work	Waiting	Adj's	Adj't No.
72	91	✓	Macys	5½x8½	Springfield	12000	1	✓	7⁴⁵	5²⁵						✓	58
			Goods	Env	R.H.	14000	1	✓									
			Greys	Flap	Macys	14000	1	✓									
			Stolze	/	Fays	14000	1	✓									
			11¾x4-40		Color	12000	1	✓									
					Ink. grid	12000	1	✓									
					- Black	12000	1	✓									
				3#		12000	1	✓									
				" " ✓		14000	1	✓									
					Carters	12000	1	✓									
						14000	1	✓									
						10000	1	✓									
						12000	1	✓									
						12000	1	✓									
						12000	1	✓									
				200		12000	1	✓									
				3x													
			x00	40		200000	16		91	–	585						
			1	600					7x–		270						
			100	640		200											
			x40	64													
				583													

465

March 29, 1932. G. W. POPPE **1,851,060**

PROCESS AND MACHINE FOR MAKING BAGS

Filed Dec. 16, 1930 6 Sheets-Sheet 1

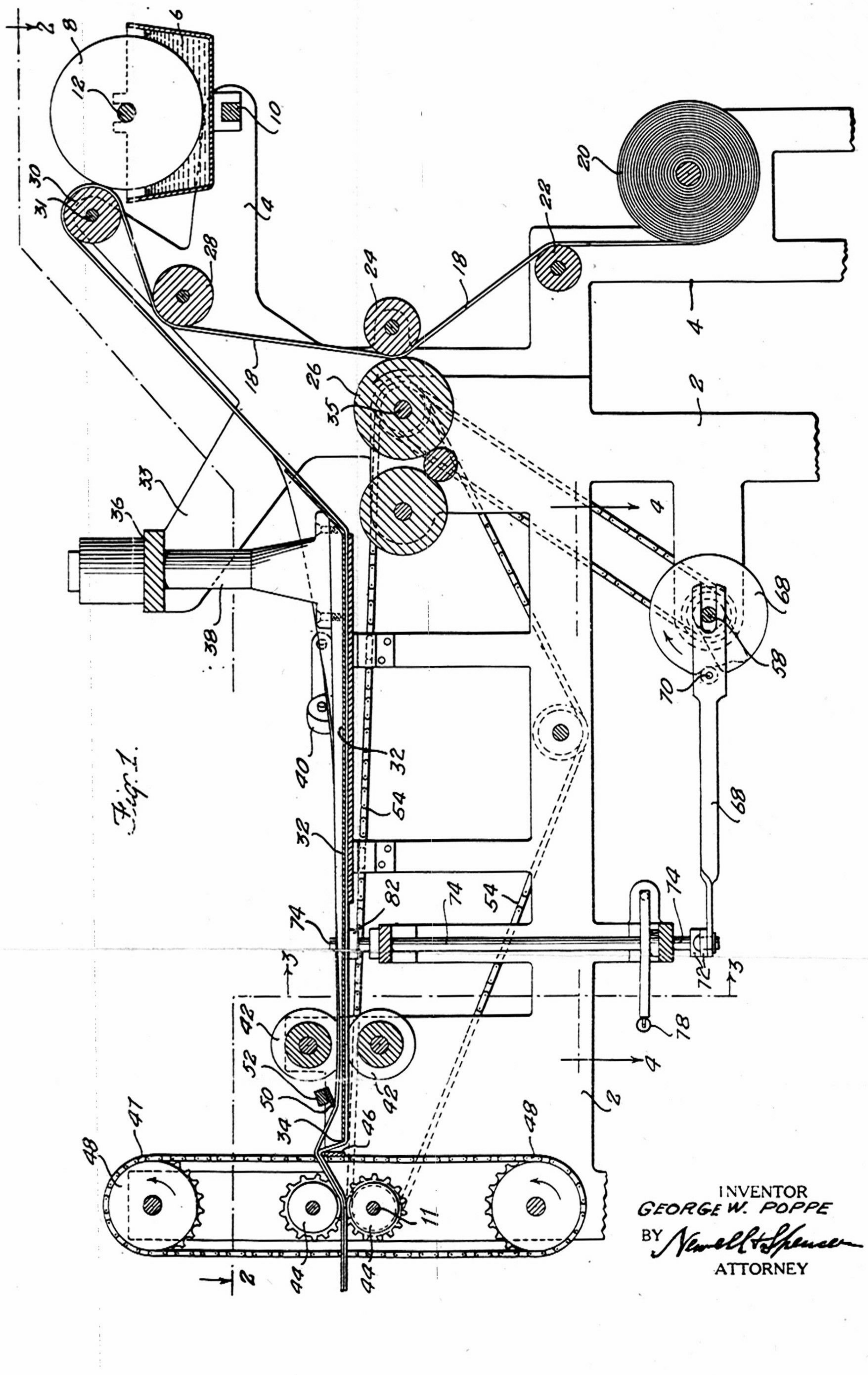

Fig. 1.

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ATTORNEY

March 29, 1932. G. W. POPPE 1,851,060

PROCESS AND MACHINE FOR MAKING BAGS

Filed Dec. 16, 1930 6 Sheets-Sheet 2

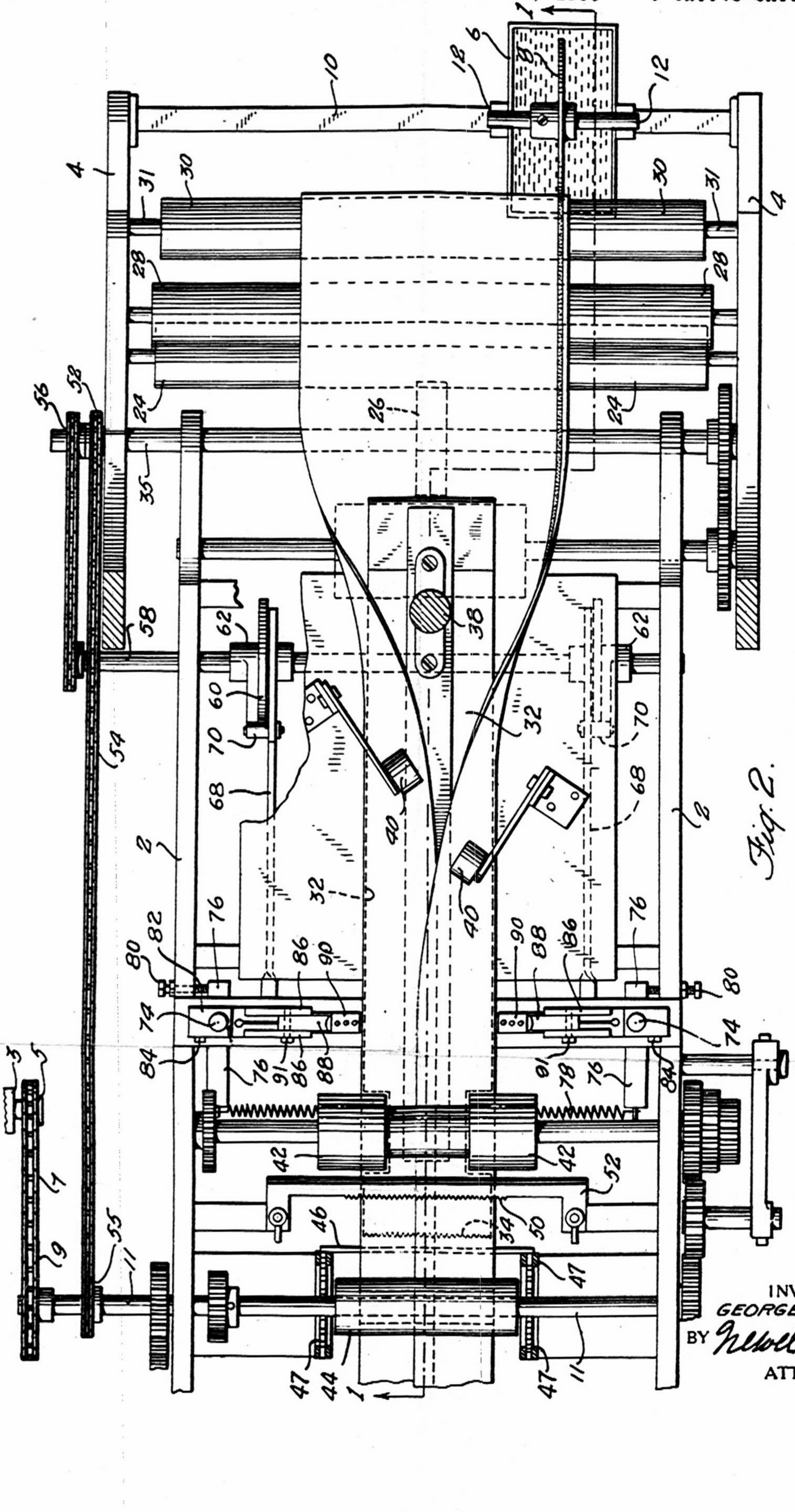

Fig. 2.

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March 29, 1932. G. W. POPPE **1,851,060**

PROCESS AND MACHINE FOR MAKING BAGS

Filed Dec. 16, 1930 6 Sheets-Sheet 3

Fig. 3.

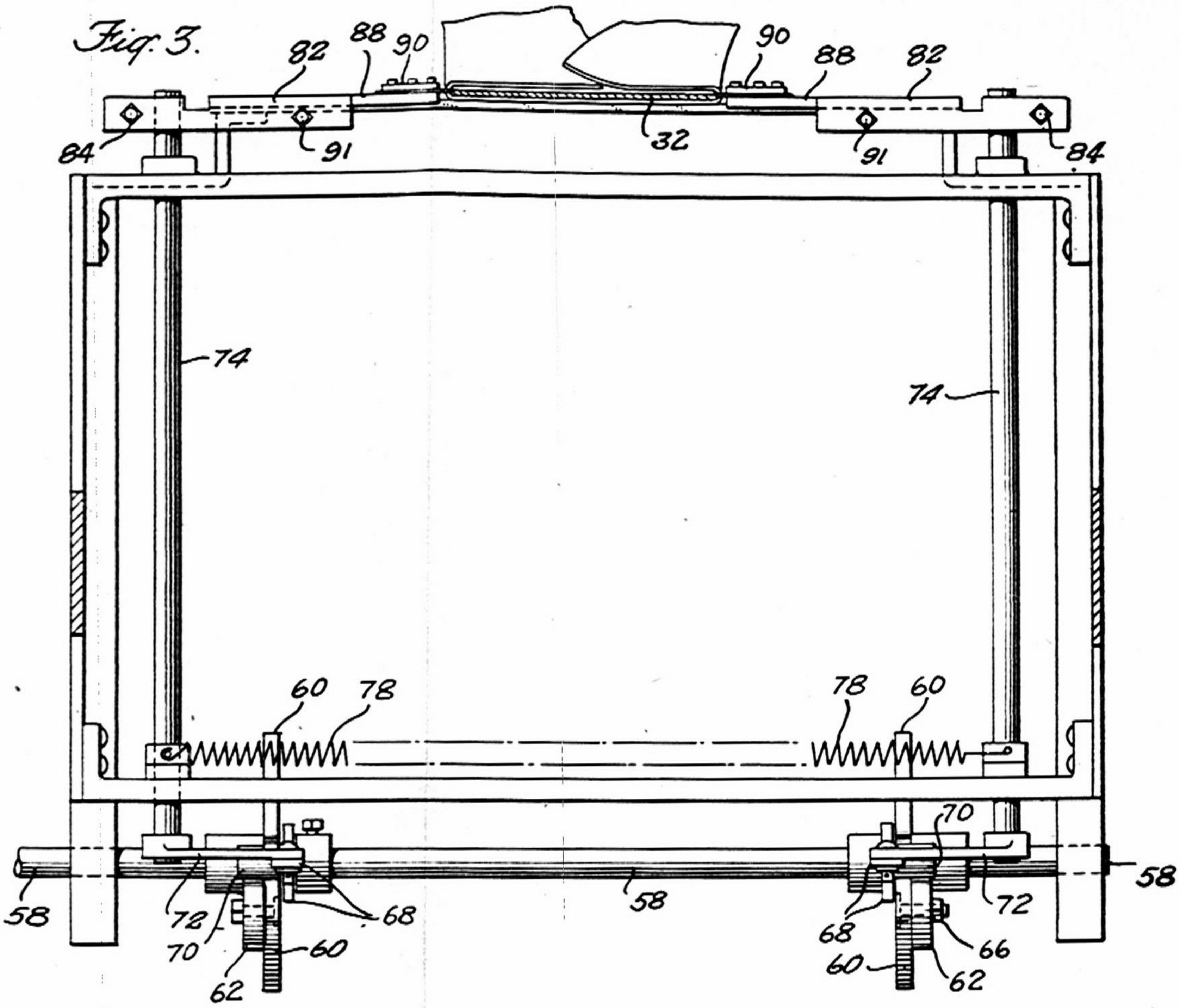


Fig. 4.

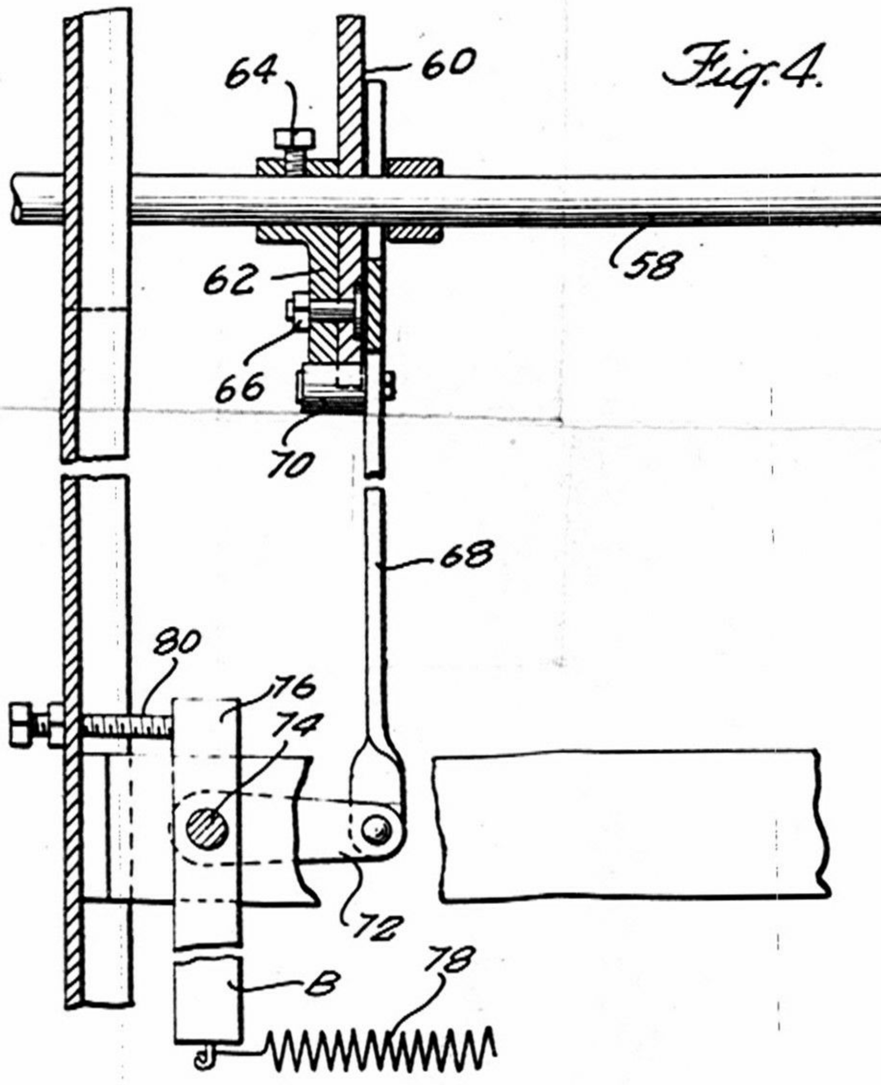
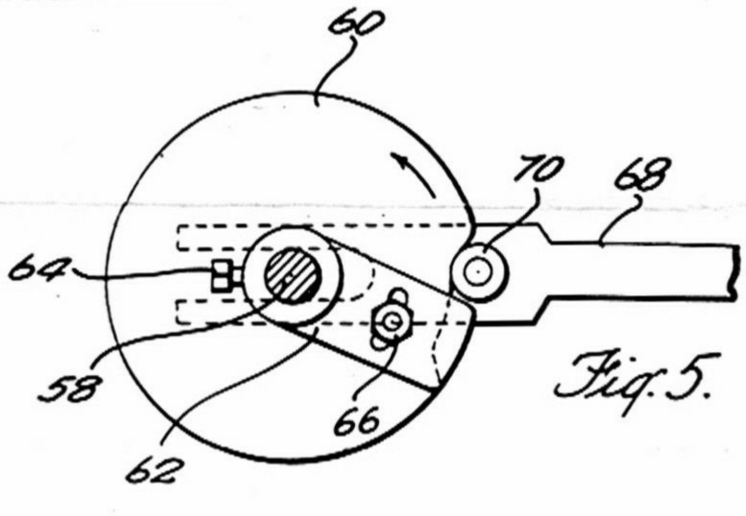


Fig. 5.



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March 29, 1932. G. W. POPPE **1,851,060**

PROCESS AND MACHINE FOR MAKING BAGS

Filed Dec. 16, 1930 6 Sheets-Sheet 4

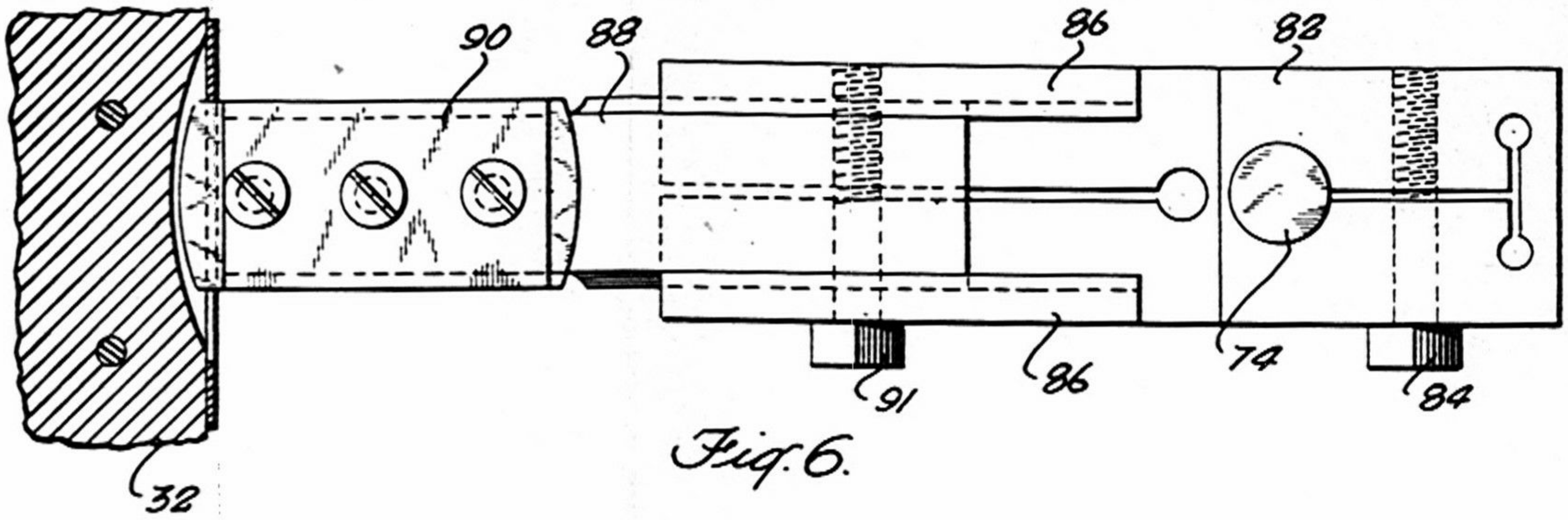

Fig. 6.

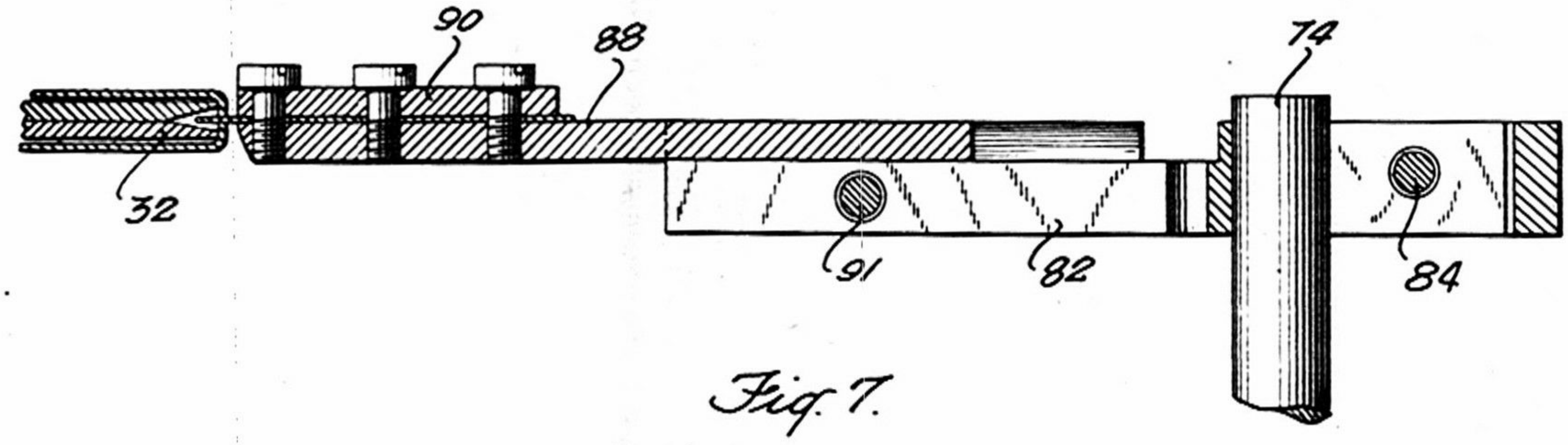

Fig. 7.

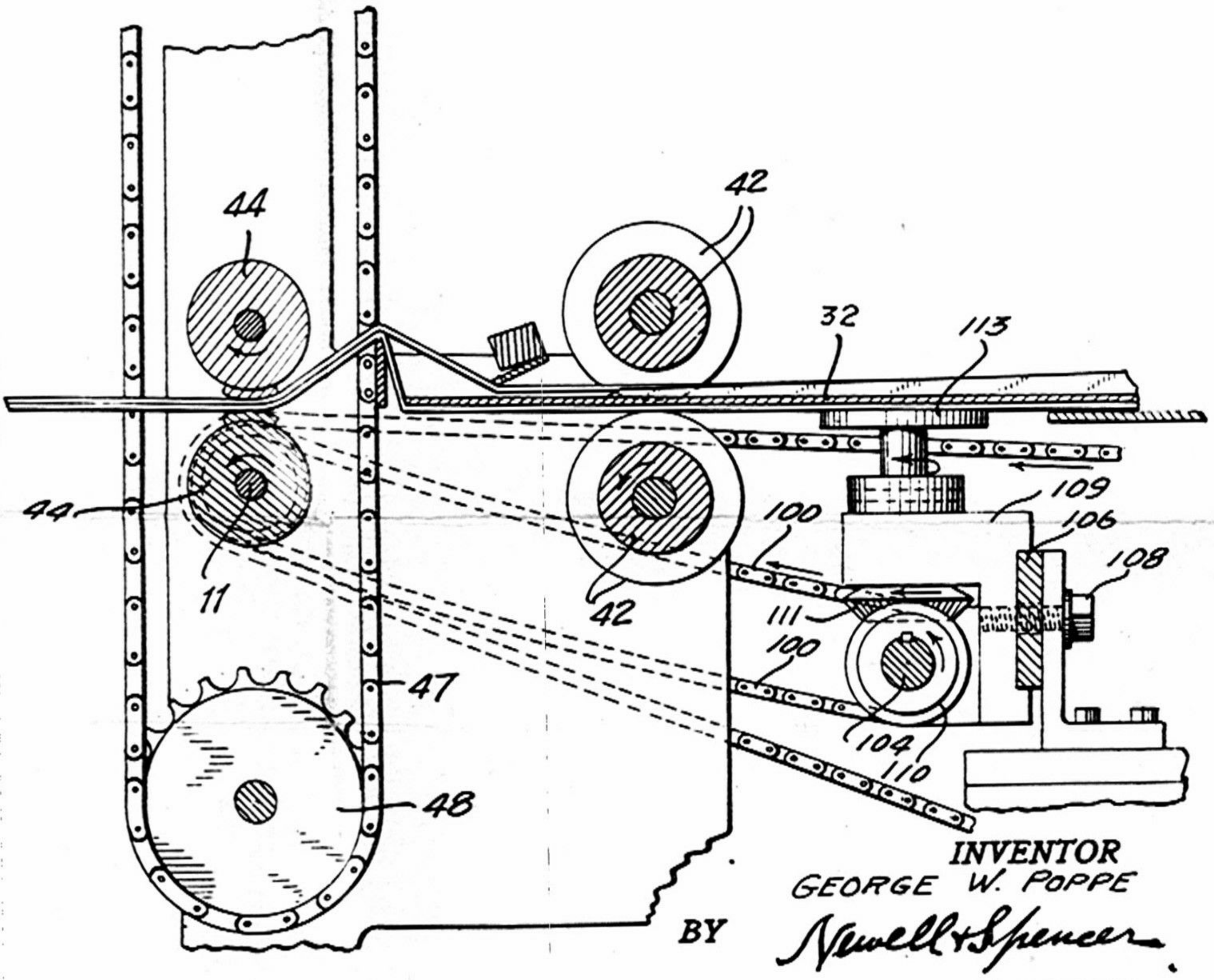

Fig. 8.

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March 29, 1932. G. W. POPPE 1,851,060

PROCESS AND MACHINE FOR MAKING BAGS

Filed Dec. 16. 1930 6 Sheets-Sheet 5

Fig. 9.

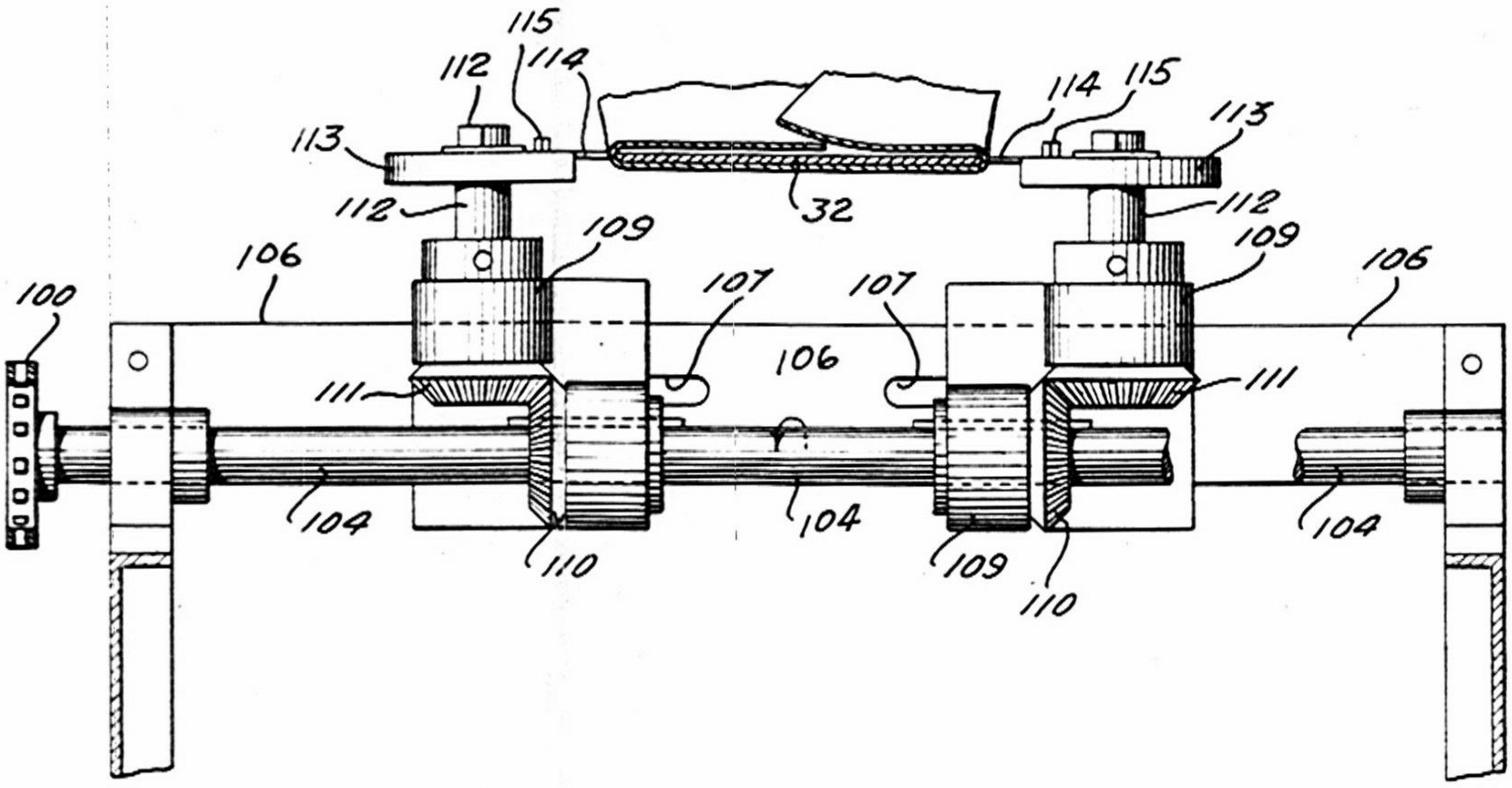
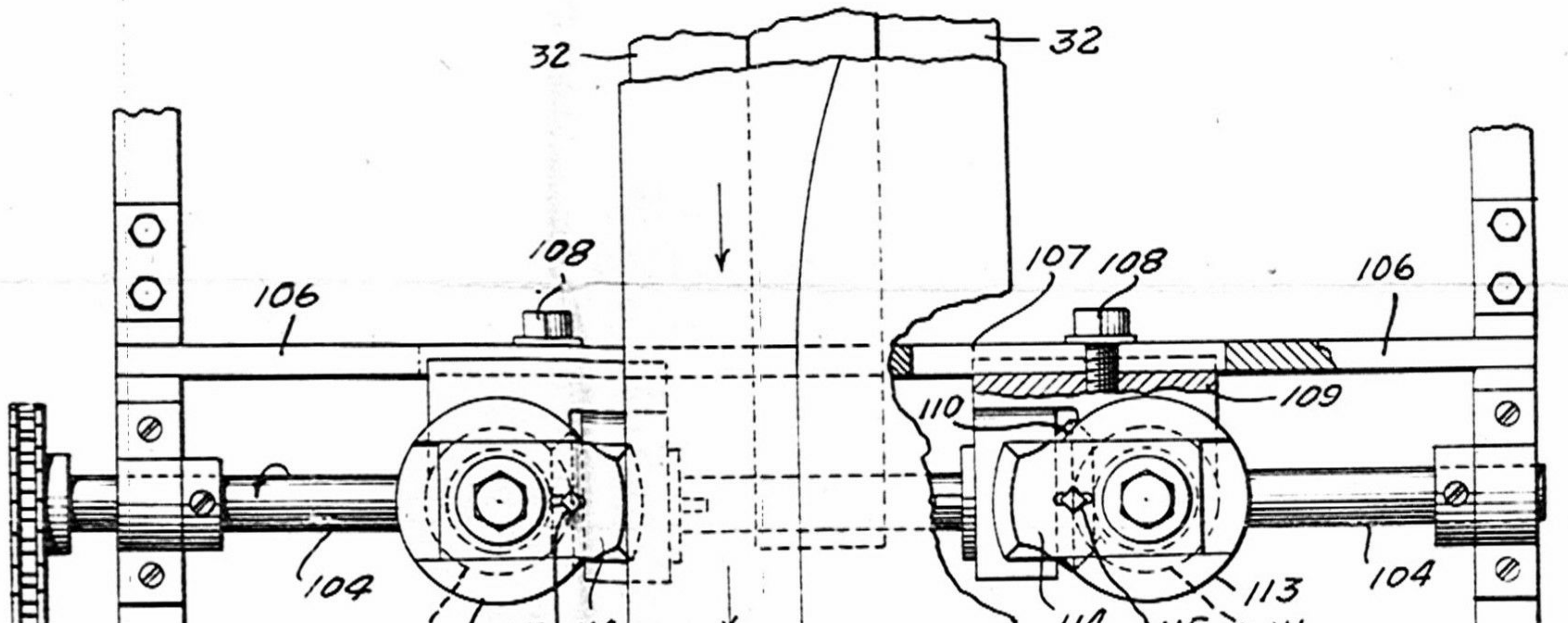


Fig. 10.



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March 29, 1932. G. W. POPPE 1,851,060

PROCESS AND MACHINE FOR MAKING BAGS

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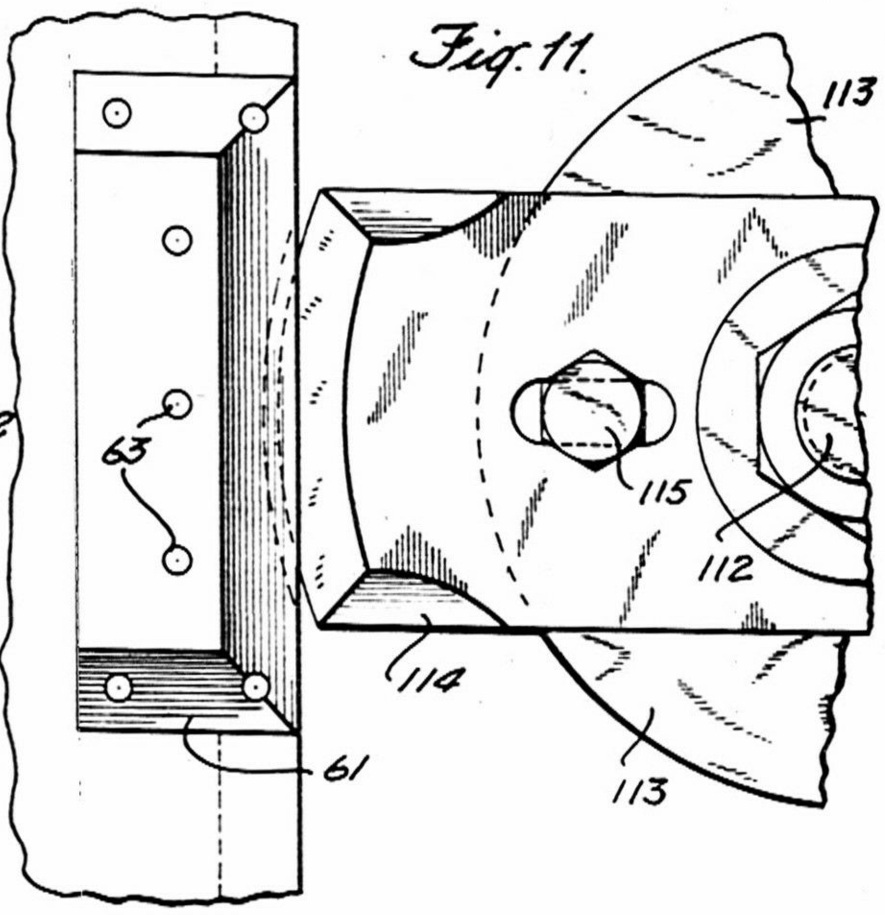
Fig. 11.

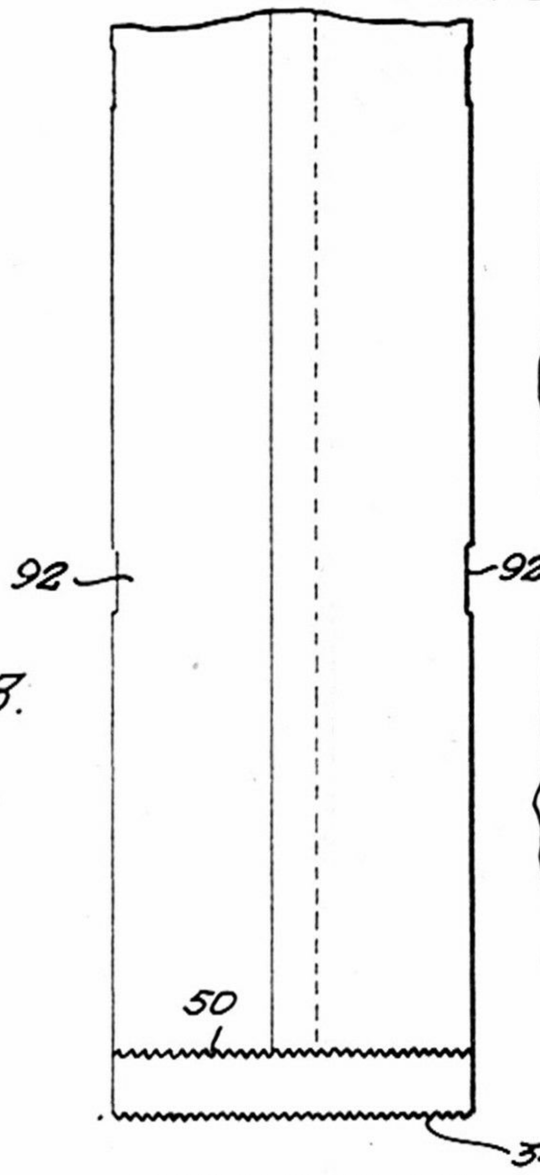

Fig. 13.

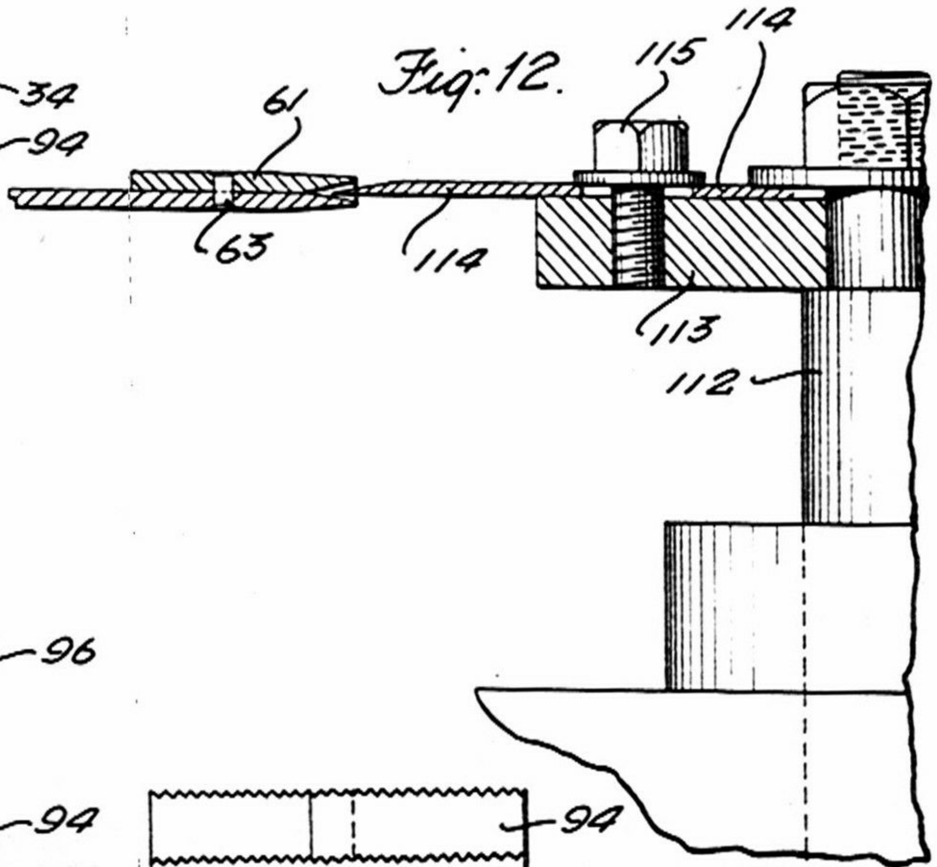
Fig. 12.

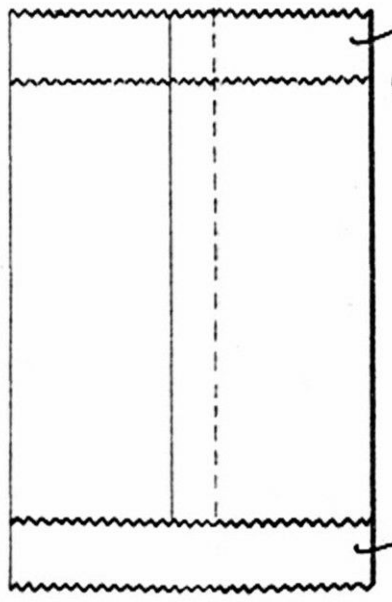

Fig. 14.

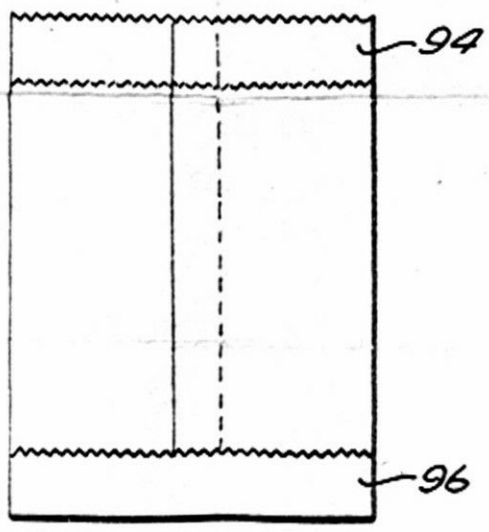

Fig. 15.

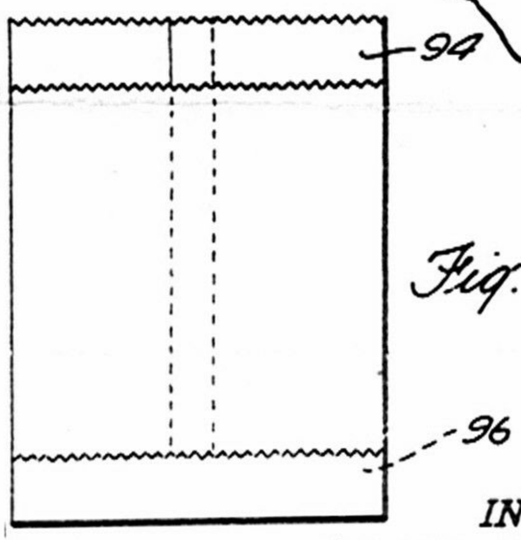

Fig. 16.

INVENTOR
GEORGE W. POPPE

BY Newell & Spencer
ATTORNEY

Patented Mar. 29, 1932 **1,851,060**

UNITED STATES PATENT OFFICE

GEORGE W. POPPE, OF BROOKLYN, NEW YORK, ASSIGNOR TO EQUITABLE PAPER BAG CO. INC., OF BROOKLYN, NEW YORK, A CORPORATION OF NEW YORK

PROCESS AND MACHINE FOR MAKING BAGS

Application filed December 16, 1930. Serial No. 502,722.

This invention relates to a process and machine for making paper bags and the like. More specifically the invention is directed to a modification of the process and machine shown in my co-pending application Serial No. 316,462, filed November 1, 1928, for process and machine for making paper bags.

In said application I have disclosed a form of machine in which the paper web is slit or die-cut prior to being folded to form the usual bag tube.

In the present application is shown a machine in which the bag tube, as distinguished from the web, is cut or slit just prior to the so-called chopping operation.

The machine to be described herein is of a well known type of bag machine with some of the parts modified and other parts added to facilitate the making of bags according to the present invention.

It may be stated that in the practical art of bag manufacture a distinction is made between bags and envelopes due principally to the process and machines for making the two separate types of receptacles. In the practical art envelopes are formed in such a way that the flaps forming the bottom closure and the free flap at the top are a continuation of the web from which the envelope is formed and both the closing flap and the free flap fold on the same side of the completed article.

In the practical art, paper bags, on the other hand, are formed by first folding a web of paper to form a bag tube and holding the bag tube under tension in engagement with cutting edges of suitably arranged knives and subjecting the tube to a sudden blow which severs it along lines of engagement with the knives.

In so far as I am aware paper bags prior to the disclosure in the said application above referred to have been provided with a very short flap and one whose outer edge is continuous. A bag so made, however, does not provide a flap of sufficient overlap to protect the corners of a bag and afford the necessary protection to the bag contents. Consequently, when protection for the bag contents is required, envelopes have been generally used instead of bags, although due to the waste in the process of manufacture and to the slower operation of the machine in making them, they are more costly than bags.

By the process and machine described in my said application and by the machine which will be described in the present application bags having long flaps can be produced as rapidly as ordinary bags and without any waste of material.

The invention will be more fully understood by reference to the accompanying drawings, in which

Figure 1 is a section on the line 1—1 of Figure 2;

Figure 2 is a view in plan with some parts in section on the line 2—2 of Figure 1;

Figure 3 is a section on the line 3—3 of Figure 1;

Figure 4 is a section on the line 4—4 of Figure 1;

Figure 5 is an enlarged detail view of a portion of the cam structure for reciprocating the knives;

Figure 6 is a plan view somewhat enlarged of the reciprocating knife for making slits in the bag tube;

Figure 7 is a longitudinal section of the parts shown in Figure 6;

Figure 8 is a sectional detail of a modified construction in which the knives are rotated instead of reciprocated as in the previous form;

Figure 9 is an elevation of the rotary knives and their mountings;

Figure 10 is a plan view of the same;

Figure 11 is an enlarged detail of a portion of one of the rotary knives and a portion of the former;

Figure 12 is a longitudinal section of the parts shown in Figure 11;

Figure 13 is a portion of the bag tube showing the appearance of the same just after a bag has been severed therefrom;

Figure 14 shows a bag length severed from the tube;

Figure 15 is a similar view with the bottom of the bag closed; and

Figure 16 is a reverse view of the bag shown in Figure 15.

Before describing the parts concerned with the present invention, brief mention will be made of the more important parts of a known bag machine to which my invention is applied. Referring to Figure 1, there is a supporting framework 2 and running transversely between the side members of this framework are a number of shafts for operating the various mechanisms, all of which are suitably driven from a motor 3 driving a pulley 5 which is connected by a belt 7 to another pulley 9 on shaft 11. The paper from which the bags are to be formed is fed as a web 18 from a roller 20, which web passes over a guide roller 22 and between rollers 24 and 26 which may be ordinary feed rollers. In some cases, however, the roller 26 may carry a printing device for printing suitable matter on the web at such distances apart that it properly appears on each finished bag. The web passes over a roller 28 and around another roller 30 which reverses its direction of movement, the latter roller being supported on a shaft 31. As the web passes around the roller 30 paste is applied thereto from a paste pot 6 into which dips a narrow disk 8, Figure 2. The disk 8 is carried by a shaft 12 supported in bearings carried by the pot 6, the whole being adjustable on a bar 10 carried by an upper arm 4 of the main frame. The paper web after passing over the roller 30 is delivered to the former mechanism which includes a former 32 whose outer end 34 is serrated and forms the cutter for severing the under side of the bag tube. The paper web passes under this former and is folded over it due to the shape of the entering edges, as indicated in Figure 2. The former is supported from an arm 33 forming part of the main frame, which frame carries a bar 36 to which is attached a post 38 to which the former is secured. As the web is folded over onto the former it is engaged by rollers 40. It then passes on as a tube between two feed rollers 42. Beyond the feed rollers the tube is momentarily retarded between two members known as pinch bars 44. These so-called pinch bars, which are in fact rollers with segments set into them over a short portion of their periphery, are so geared that when the tube is engaged between the two segments it is slightly retarded and it is at this time that the so-called chopping is effected. For this purpose a striker bar 46 attached to a sprocket chain 47 passes over sprocket wheels 48, strikes a sharp blow to the under side of the tube and causes the under wall thereof to be severed by the edge 34. At substantially the same time the upper wall of the tube encounters the serrated edge of a second knife 50 supported on a bar 52, Figures 1 and 2, which in turn severs the upper wall of the tube.

Up to this point the machine described is the ordinary type of bag machine but the present machine differs from it in that the knife 50 is set back a greater distance from the edge 34 of the former in order that the finished bag may have a long flap. It may be stated that in the ordinary paper bag machine the edge of the knife 50 is placed so close to the edge of the former blade and the former is so curved that the two cuts made by the separate cutting knives meet at the sides of the bag. As previously stated, however, this form of bag produces a short lip and the edges of the lip do not sufficiently cover the corners of the bag to properly protect their contents. To make a long lipped bag in a practical manner cuts or slits are preferably made in the bag tube.

In the present invention I have shown two forms of tube cutting or slitting mechanism, one acting through reciprocatory knives and the other through rotary knives. The reciprocatory form will be first described.

Shaft 35 which carries the roller 26 is provided with a sprocket wheel 52 over which passes a sprocket chain 54 leading from a sprocket wheel 55 on shaft 11. Another sprocket wheel 56 on the shaft 35 transmits motion to shaft 58. The shaft 58 carries two cams 60, one of which is shown in detail in Figure 5 and in elevation and section in Figures 3 and 4. The cam is circular for most of its periphery but has a short depressed portion whose extent of action may be varied by an arm 62 adjustably secured to the shaft 58 by a screw bolt 64 and adjustably secured to the cam 60 by a similar screw bolt 66. A pitman 68 is forked as shown in Figure 1 and engages the shaft 58 and is provided with a roller 70 for engagement with the cam 60. At its left end, as shown in Figure 1, the pitman is pivoted to arm 72 secured to a shaft 74 which latter is connected to the knife holders for reciprocating the knives. There is one of these shafts 74 on either side of the machine as shown in Figure 3, the shafts being supported in the framework at their upper and lower portions. Near their lower portions each shaft carries an arm 76, Figure 4, the arms being connected by a spring 78. A screw 80 passing through the side framework, engages one end of the arm to limit the rocking of the shafts 74 under action of the spring 78. Normally the spring 78 tends to move the shafts 74 to render the knives active and this occurs during the time the depressed portion of the cam 60 is in engagement with the roller 70 as shown in Figure 5. During the rest of the rotation of the cam 60, however, the shafts 74 are held against the tension of their spring 78 by the peripheral surface of the cam because it is only at bag length intervals that the slitter knives are rendered active to make short slits in the edge of the bag tube, these slits being of a length corresponding to the length of the flap desired. By adjusting the arm 62 a longer or shorter cut will be made, as will be readily appreciated. For finer adjustment the screws 80 may be moved in or out. The knives themselves are supported by holders 82, Figures 3, 6 and 7, each holder having a longitudinal split adjacent the hole through which the shaft 74 extends, a clamp screw 84 serving to clamp the holder to the shaft. The holder has undercut guides 86 with which the knife supporting member 88 engages, the knife itself being shown at 90 and may consist of an ordinary razor blade, such for instance as the familiar Gillette blade, which is merely screwed to the knife supporting member 88 as clearly shown in Figure 6. The knife supporting member 88 is adjustable along the guides 86 by means of a clamp screw 91. In order that the knives may be free to cut through the tube as it passes along the former 32, short shallow recesses are provided as indicated in Figures 6, 11 and 12. A thin plate of steel 61 overlies the former adjacent the knives. This is beveled at the under side as shown in Figure 12, the former being also beveled for a short portion of its length adjacent the plate, the latter being secured to the former by rivets 63.

From the above it will be obvious that as the cam 60 rotates the knives will be reciprocated and during the time that the roller 70 occupies the lower part of the cam the cutting edges of the knives will be effective to make the proper length of slit. Referring now to Figure 2 it will be noted that these slits are made just prior to the time of the severance of the tube to form separate bags.

Figure 13 shows a portion of a bag tube having slits 92 formed in the sides thereof and also shows the appearance of the tube just after a bag length has been severed. The portion indicated at 50 represents the serrations made by the knife 50 in the upper wall of the bag tube. 34 indicates the serrations in the lower wall of the bag tube made by the edge 34 of the former. The distance between these two series of serrations determines the length of the bag flap, which flap is indicated at 94 Figure 14. Figure 14 represents the condition of the bag after complete severance thereof from the tube. The lower portion 96 of the bag shown in Figure 14 corresponds to the bottom portion of the bag which when folded over forms the finished bag of Figure 15. Figure 16 shows the same bag from the reverse side. It will be noted that the bottom flap 96 is folded over against the upper wall of the tube while the flap 94 is adapted to be folded back over the other wall. This will be clearly understood by a comparison of Figures 15 and 16.

In the form of device shown in Figures 8 to 12 rotary cutters are used as distinct from reciprocatory cutters. The lower pinch bar 44 carries a sprocket wheel about which a sprocket chain 100 passes, Figure 10, which chain engages a sprocket wheel 102, Figure 8, on shaft 104 suitably supported in the side frames as indicated in Figure 9. The side frames also carry a bar 106 extending across the entire machine, said bar being provided with two longitudinal slots 107, Figure 9. A nut bolt 108, one for each knife support, is provided and passes through a slot 107 and into a knife support 109 as shown most clearly in Figures 8 and 10. The support 109 forms a bearing for a beveled gear 110 which is splined to the shaft 104 so that it may move therealong as the support 109 is moved along the bar 106. The support also forms a bearing for another beveled gear 111, the shaft 112 of which carries at its upper end a disk 113 to which the knife 114 is secured by a screw 115. The parts just described are duplicated as indicated in Figure 9 and the timing and adjustment of the parts is such that each knife makes the desired length of cut upon each rotation of the shaft 104.

The bar 52, Figure 2, may be moved back and forth for varying the length of flap and bars having knives of different shape may be used. The former also may have its cutting edge 34 varied to produce different shaped bag lips.

It is of course to be understood that other variations may be resorted to within the scope of the invention without departing from the spirit thereof.

What is claimed as new is:

1. A process of making paper bags which comprises folding a web of paper to form a bag tube, slitting the tube at opposite sides and severing both walls of the tube along lines which connect opposite ends of the slits.

2. In a bag machine, the combination with bag tube forming mechanism, means for making slits in the tube and offset choppers for severing the tube into bag lengths, said choppers acting to sever the respective walls of the tube along lines which connect opposite ends of the slits.

3. In a bag machine, the combination with bag tube forming mechanism, of reciprocatory slitters for making slits in the opposite edges of the tube and transverse cutters to sever the tube along lines which meet opposite ends of the slits.

4. In a bag tube machine the combination with bag forming mechanism, of rotary slitters for making slits in the opposite edges of the tube, and tranverse cutters to sever the tube along lines which meet the opposite ends of the slits.

Signed at New York city, New York, this 18th day of November, 1930.

GEORGE W. POPPE.

N° 9156 A.D. 1906

Date of Application, 18th Apr., 1906—Accepted, 11th Apr., 1907

COMPLETE SPECIFICATION.

Improvements in and relating to Envelopes.

I, Louis Clifford Vanderlip, of 431 South Main Street, Elkhart, County of Elkhart, State of Indiana, United States of America, Gentleman, do hereby declare the nature of this invention and in what manner the same is to be performed to be particularly described and ascertained in and by the following statement:—

The invention is an improvement on that kind of envelope wherein a flexible metal strip is secured to the body of the envelope and its sealing flap to be bent over the mouth of the envelope and secure it in its closed position.

The object is to provide an envelope wherein a pocket is provided by overlapping and securing the ends of the side flaps together, said pocket being provided for the reception of a flexible metal strip adapted to retain the sealing flap in closed position.

With the above object in view, the invention consists of the construction, combination and arrangement of parts hereinafter fully described, claimed and illustrated in the accompanying drawings, wherein:

Figure 1 is a view in front elevation of my invention.

Figure 2 is a vertical central sectional view on the line 2—2 of Figure 1, illustrating the envelope closed for sending second class matter through the mails.

Figure 3 is a transverse sectional view on the line 3—3 of Figure 1.

Figure 4 is a perspective view of the upper end of the envelope, the same being shown closed for sending first class matter through the mails, and

Figure 5 is a plan view of the blank from which the envelope is formed.

Referring to the drawings by reference numerals, 1 designates an envelope which is constructed from a single blank of material. The side flaps 2 are extended above the upper edge of the front 3 and have their vertical ends overlapped and securely attached to each other by means of mucilage to provide a reinforced sealing flap 4 and a pocket 5 for the reception of a flexible metal strip 6. The front 3 of the envelope has its lower end extended below the lower edges of the side flaps 2 to provide a bottom flap 7, which is bent upwardly to engage over the lower edges of the side flaps 2 and secured in position by mucilage. The pocket 5 is located in the back of the envelope formed by the flaps 2 and extends upwardly through the sealing flap 4 and opens out through the upper edge of the latter to facilitate the application of the metal strip 6 and to locate the metal strip in such position that the bending of the sealing flap 4 will also bend the strip 6. The strip 6 retains the sealing flap in closed position, and said flap may be bent downwar[illegible] velope, as illustrated in Figure 2 of the drawings, to adapt the en[illegible] used for sending second class matter through the mails, or the seali[illegible] be bent down upon the front 3, or bent down thereon and the up[illegible] closed end of the envelope may be bent one or more times upon its[illegible] strated in Figure 4 of the drawings to adapt the envelope to be us[illegible] nding first class matter through the mails. The location of the sealin[illegible] on the inside of the envelope permits the ready inspection of the cont[illegible] the envelope, while its location on the

[*Price* 8*d*.]

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front of the envelope or the bending of the closed end of the envelope one or more times upon itself securely closes the envelope.

It should be apparent from the above description, taken in connection with the accompanying drawings, that I provide an envelope which in its construction provides a reinforced sealing flap and a pocket for the reception of the flexible strip, and that the flexible strip retains the sealing flap in such closed position as to adapt it to be used for sending first or second class matter through the mails. It should also be apparent that the envelope is simple of construction and and that it may be manufactured and sold at a comparatively low cost.

Having now particularly described and ascertained the nature of my said invention, and in what manner the same is to be performed, I declare that what I claim is:—

An envelope wherein the side flaps are secured together in a manner to provide a pocket for the reception of a flexible metal strip, said pocket being located in the envelope to permit the sealing flap of the envelope to be secured in closed position by bending the said flexible strip.

Dated this 27th day of November, 1906.

VICTOR J. EVANS,
Agent.

Redhill: Printed for His Majesty's Stationery Office, by Love & Malcomson, Ltd.—1907.

[This Drawing is a reproduction of the Original on a reduced scale.]

Fig. 1.

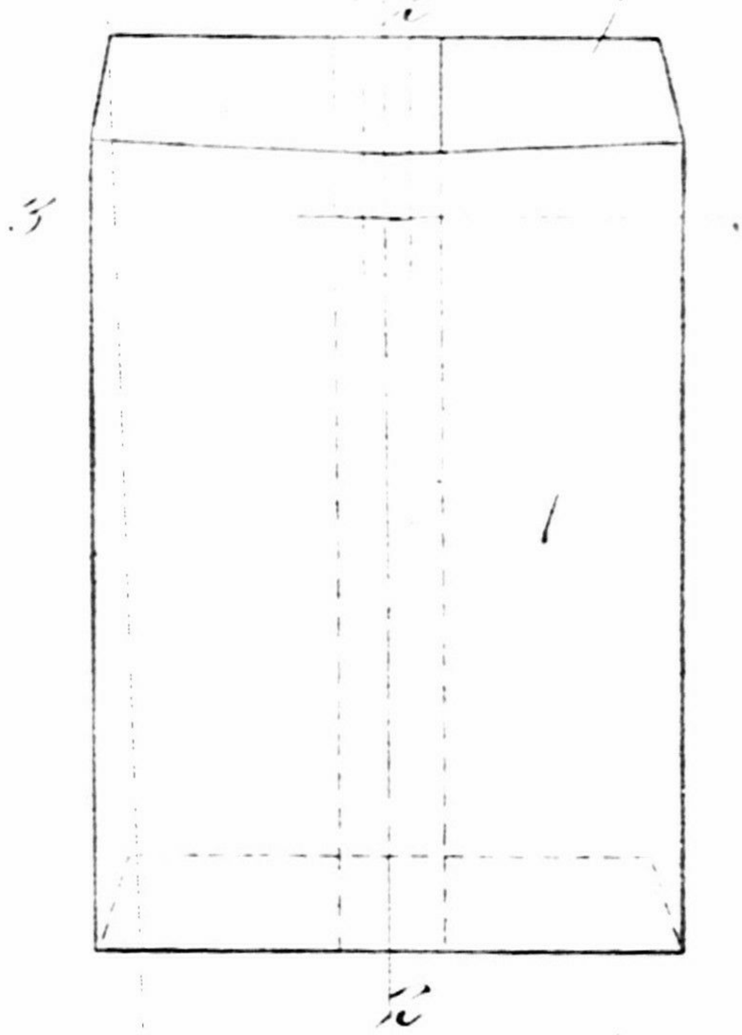


Fig. 2.

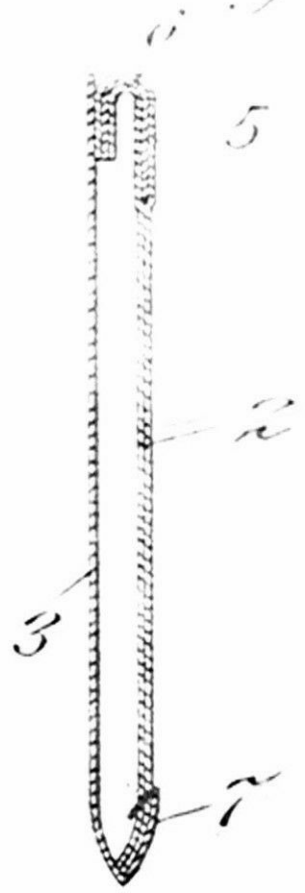


Fig. 3.

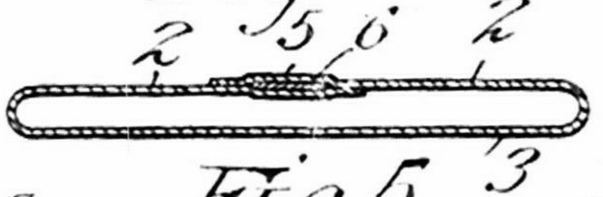


Fig. 4.

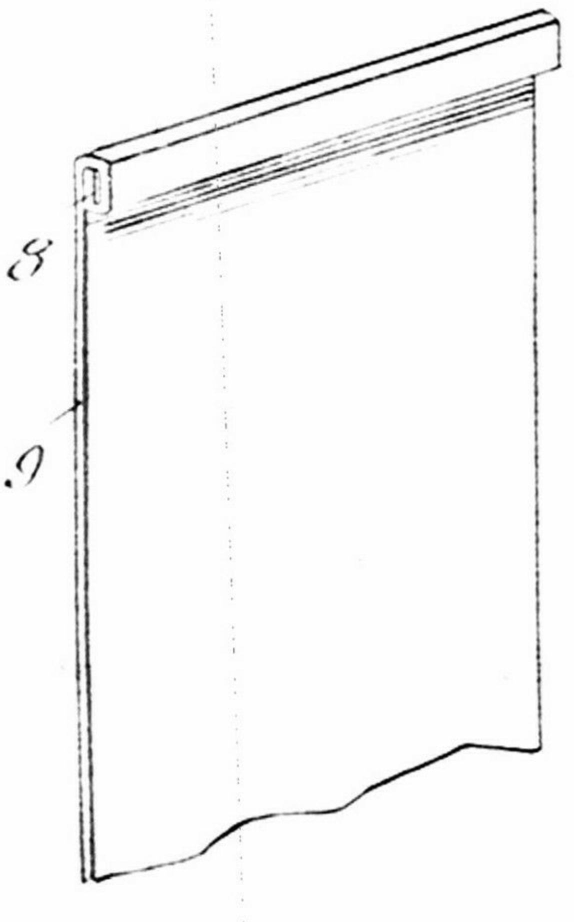
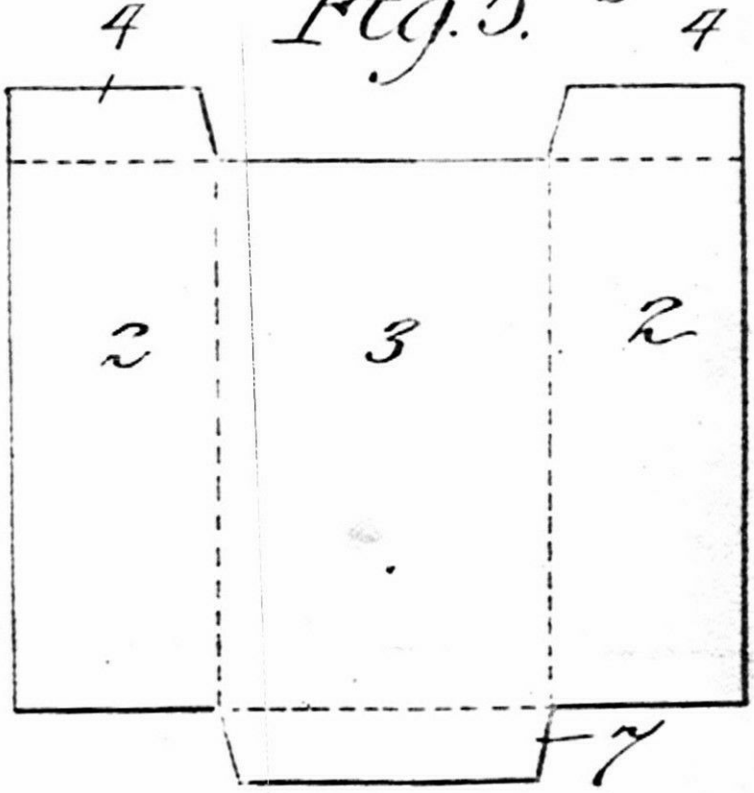


Fig. 5.



Malby & Sons, Photo-Litho.

A.D. 1873, [illegible] N° 1622.

L[illegible]s PA[illegible] [illegible] Patent [illegible]ce," No. 8, [illegible] [illegible]aws, for the Invention [illegible] [illegible] Bags."—A communicat[illegible] [illegible] John P. [illegible]derdonk, [illegible] [illegible] States of [illegible]ca.

[illegible] [illegible]ine at the [illegible]etition and [illegible] 9th Section

TO A[illegible] [illegible]COME, I, GEORGE [illegible] No. 8, S[illegible]mpton [illegible] of the "Internationa[illegible] [illegible], London, Doctor of Laws, send [illegible]

[illegible]EAS I am in possession of a [illegible] for "I[illegible]EMENTS [illegible]FACTURE OF PAPER BAGS," and [illegible] [illegible]oned Her Majesty to grant unto me, my executors, administrators, and assigns, Her Royal Letters Patent for the same, and have made solemn Declaration that it has been communicated to me from abroad by Edwin J. Howlett and John P. Onderdonk, both of Philadelphia, Pennsylvania, United States of America.

NOW KNOW YE, that I, the said George Haseltine, do hereby declare that the following Complete Specification, under my hand and seal, fully describes and ascertains the nature of the said Invention, and in what manner the same is to be performed, in and by the following statement, reference being had to the accompanying Drawing forming a part of this Specification:—

This Invention relates to improvements in the manufacture of that class of paper bags known as "satchell bottomed" bags, that is to say, bags with rectangular bottoms; and it consists in folding and cementing a strip of paper into tubular shape as herein-after described, cutting from the tube so formed a section of suitable length in such a manner as to leave a flap turning down, the end of the tube adjacent to the flap, and cementing the said end to the outside of the bag to form a bottom, which when the bag thus formed is opened or filled shall assume a rectangular shape. The Drawing shews the bag in different stages of manufacture.

Figure 1 is a perspective view illustrating the said Invention; Figure 2, a plan; and Figure 3 is a side view of the same; Figure 4 is another plan; Figure 5 represents the complete bag expanded; Figure 6, the inside of the bottom; and Figure 7, the outside of the bottom thereof.

To describe these improvements more particularly a strip of paper or the end of a long strip thereof is taken and folded, as shewn in Figure 1, the edges being lapped and the sides bent inward to form the longitudinal folds a. The lapped edges having been pasted together, three sides of the tube thus formed are cut in the line (or plane) b, c, and the fourth side in the line d, e, tearing or cutting off the waste end, the left hand end in Figure 1 on the lines b, d, and c, e, Figure 2, which leaves a projecting flap or end f, Figures 2 and 3. The tube is preferably flattened before cutting. Then a section of sufficient length to form the bag is cut from the tube in the manner just described, the three upper sides projecting beyond the lower side, as seen at the right hand end of Figure 1, so as to leave a flap for the next bag; the left hand end of the severed section is then folded down on the line g, h, and pasted to the outside of the bag, as shown in Figure 4.

The shape of the opened or filled bag thus made is shown in Figure 5, the inside of the bottom in Figure 6, and the outside of the bottom in Figure 7.

The above described operations may be performed either by hand or machinery; the order in which they are performed may be varied according to convenience. When the bag is made by machinery guide fingers or other devices for turning the paper inward to make the folds should be attached to the ordinary machine for making tubular bags.

Having thus fully described the said Invention as communicated to me by my foreign correspondents, and the manner of performing the same, I wish it understood that I claim, a satchel bottomed paper bag made with two longitudinal folds a, a flap f and a single lateral fold extending from g to h, and cemented to the outside of the bag to form the bottom thereof, as herein described.

In witness whereof, I, the said George Haseltine, have hereunto set my hand and seal, this Fifth day of May, in the year of our Lord One thousand eight hundred and seventy-three.

GEORGE HASELTINE. (L.S.)

Witness,
JAMES EDWARDS,
8, Southampton Buildings,
London.

LONDON:
Printed by GEORGE EDWARD EYRE and WILLIAM SPOTTISWOODE,
Printers to the Queen's most Excellent Majesty. 1873.

A.D. 1873. May 5. No. 1622.
HASELTINE'S COMPLETE SPECIFICATION.

(1 SHEET)

FIG. 1.

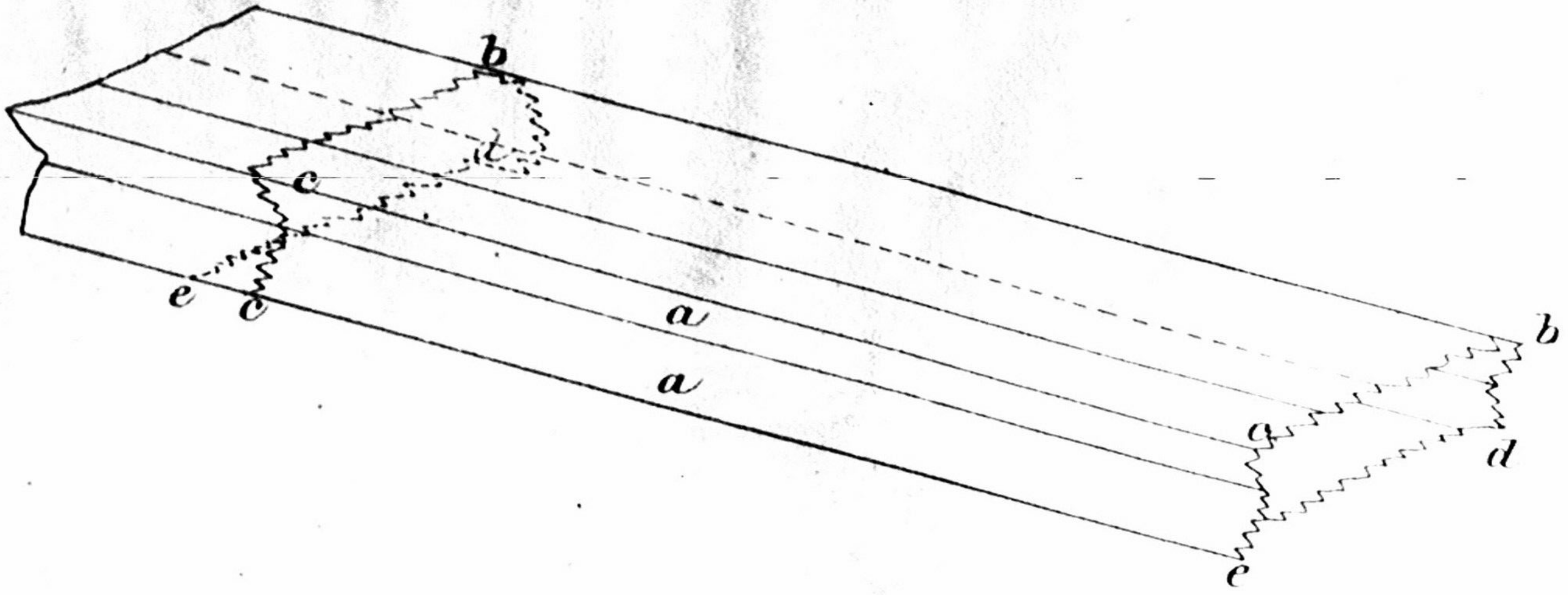


FIG. 2.

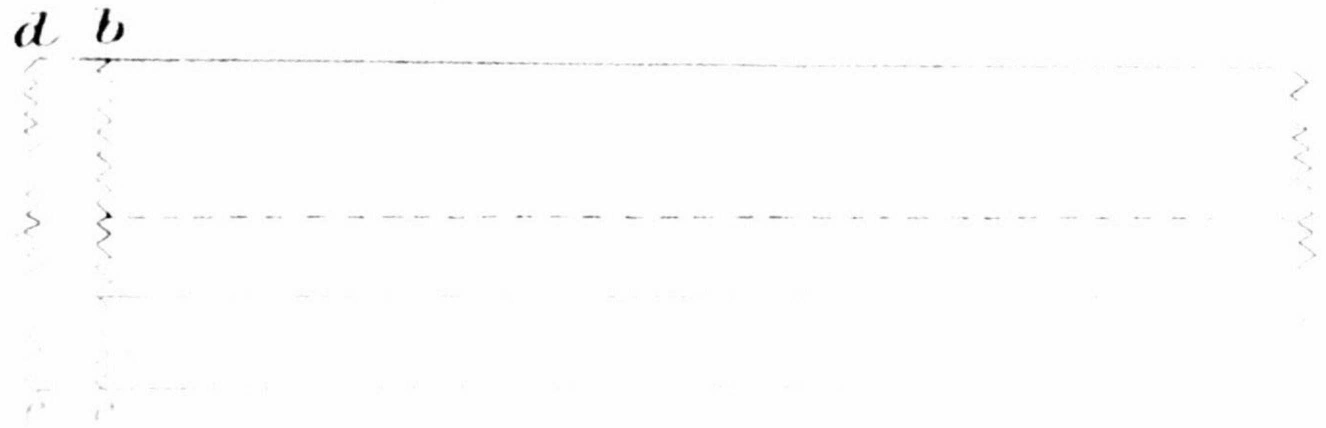


FIG. 5.

FIG. 3.

FIG. 4.

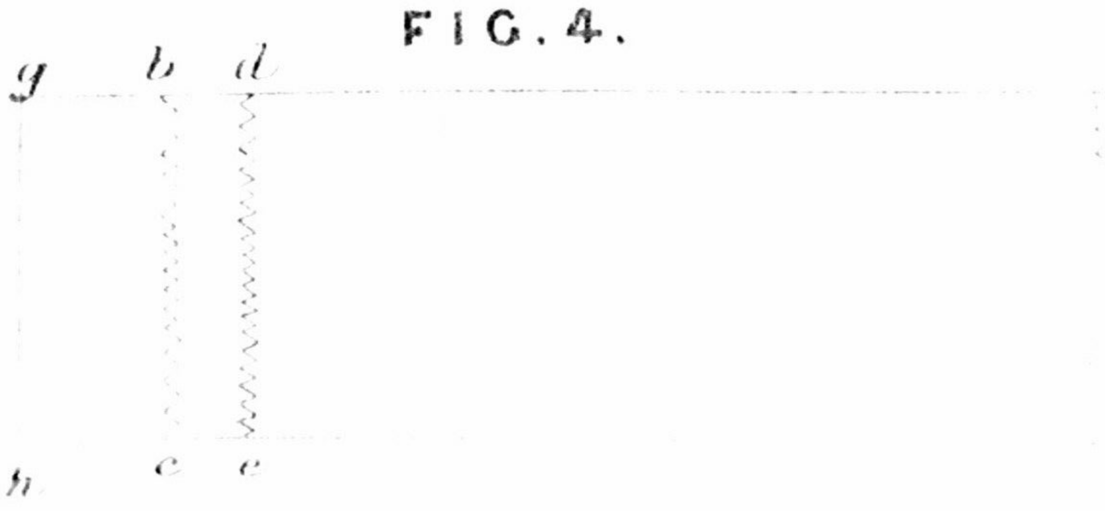


FIG. 6.

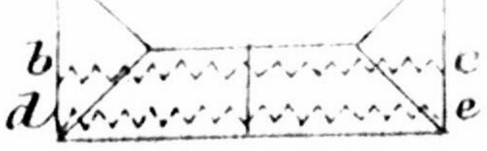
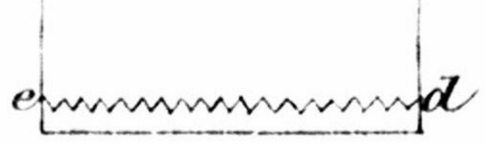


FIG. 7.



169

The filed drawing is not colored.

Drawn on Stone by Malby & Son

LONDON Printed by George Edward Eyre and William Spottiswoode
Printers to the Queen's most Excellent Majesty 1873

77

March 6, 1928. **1,661,884**

J. M. DRIVER

CONTAINER AND METHOD OF SEALING

Filed Sept. 6, 1922

Fig. 1.

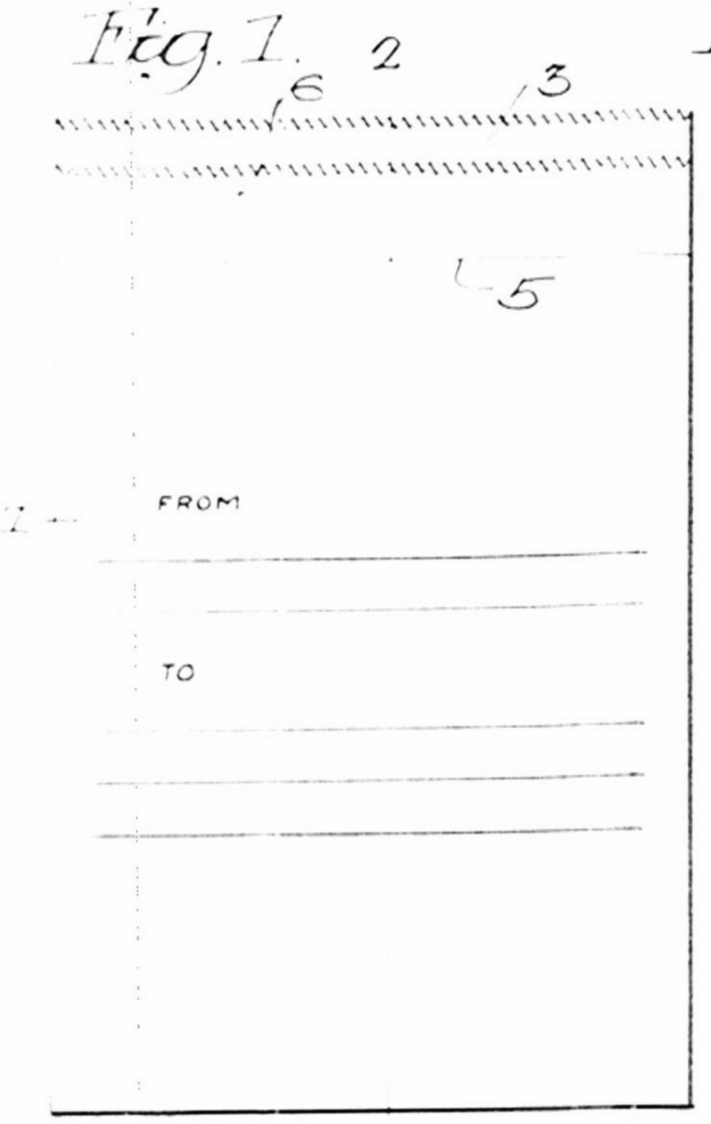


Fig. 2

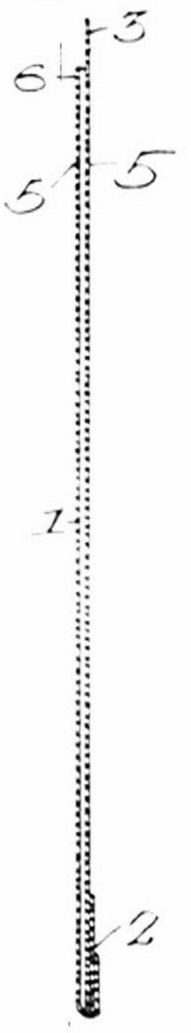


Fig. 3.

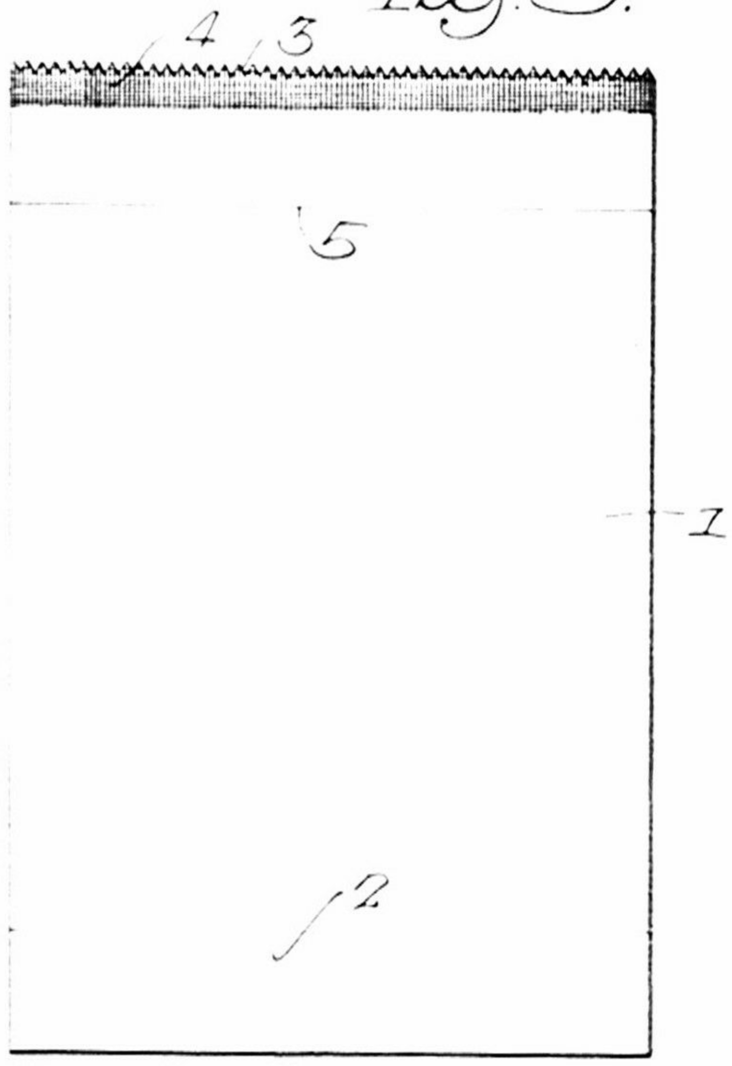


Fig. 4.

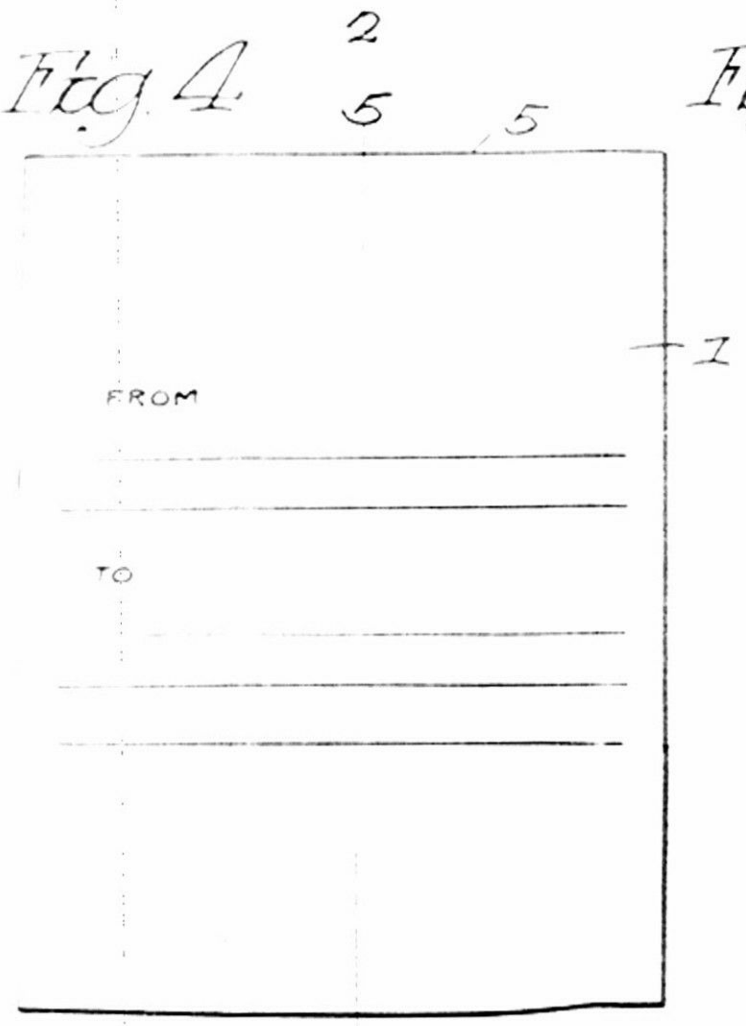


Fig. 5.

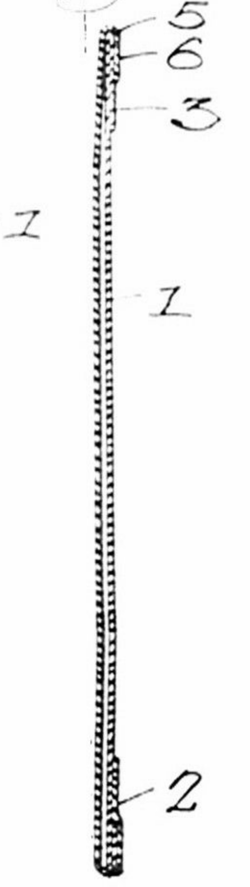
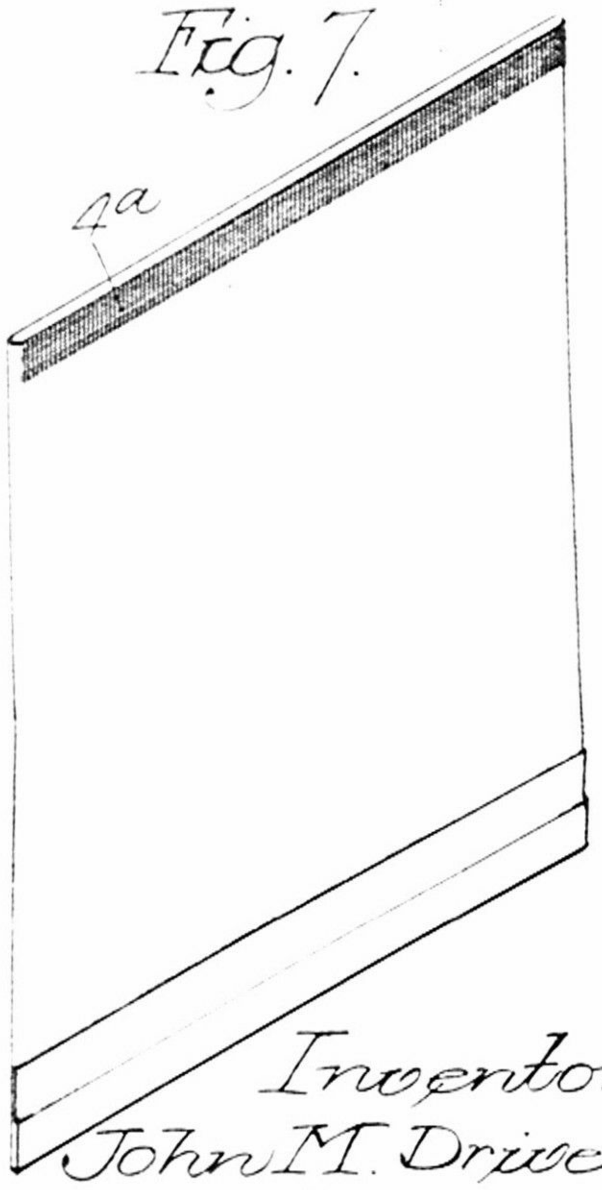


Fig. 7.



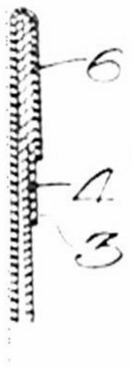


Fig. 6.

Inventor-
John M. Driver.
by his Attorneys-
Howson & Howson

Patented Mar. 6, 1928. **1,661,884**

UNITED STATES PATENT OFFICE.

JOHN M. DRIVER, OF PHILADELPHIA, PENNSYLVANIA.

CONTAINER AND METHOD OF SEALING.

Application filed September 9, 1922. Serial No. 587,151.

The object of this invention is to provide a novel container and method of sealing.

In the attached drawings:

Figure 1, is a front view of a container made in accordance with my invention:

Fig. 2, is a section on the line 2—2, Fig. 1:

Fig. 3, is a back view of the container illustrated in Figs. 1 and 2;

Fig. 4, is a front view of the container sealed;

Fig. 5, is a section on the line 5—5, Fig. 4.

Fig. 6, is a fragmentary enlargement of the upper portion of the sealed bag as illustrated in Fig. 5, and

Fig. 7, is a view in perspective of a container illustrating a modification within the scope of the invention.

In the industry, bags are distinguished from envelopes chiefly by the methods of manufacture, and by the fact that whereas in the envelope the sealing flap is on the front face, in the bag this flap (when provided) is on the rear face. In sealing a bag in normal fashion, it accordingly is necessary to turn the flap down over the front face, which mars the appearance of the container.

I have found, however, that a bag of the usual form lends itself to the development of a container which is particularly useful for second-class mail where it is necessary to leave the container sufficiently open to permit inspection of the contents.

With reference to the drawings, I have in Figs. 1 to 6, inclusive, illustrated a common form of bag, this bag, as will be seen, consisting of a tubular blank 1 of paper turned back at the bottom and sealed as indicated at 2, the rear side of the blank at the top extending somewhat above the front face to form a flap 3. At the rear of the flap 3, I prefer to place an adhesive 4, such as is commonly used on the edges of envelopes, and it is also preferable to score the bag near the top, as indicated by the reference numeral 5, thereby to assist the folding back of the upper portion of the bag and insuring its lying flat when folded. The bag so formed and sealed as illustrated in Figs. 4 and 5 by turning back the upper portion of the bag along the scored line 5 and securing the flap 3 to the back of the bag by means of the adhesive 4, may be employed for sending second or third-class matters through the mails, this by reason of the fact that the turned back portion 6 of the front face of the bag is held loosely in place only by its connection with the flap 3, and the bag may be distorted to permit passage of the hand under the flap 6 and into the interior of the bag, or to permit inspection of the contents.

Although this invention finds its most useful application in the case of the so-called bags, it will be understood that it is not limited to this particular form of container. Thus, for example, as shown in Fig. 7, the flap 3 is eliminated, the front and rear faces of the container being of equal height, and the strip of adhesive 4^a is secured to the upper edge of the rear face of the bag, so that when the upper portion of the bag is turned back, this adhesive may act to effectively seal the container while still permitting access to the interior without breaking the seal.

Still other modifications are possible with no departure from the essential features of the invention.

I claim:

1. A bag comprising a tubular blank sealed at one end and having one face extending at the other end beyond the end edge of the other face, and an adhesive on the outside and at the open end of said bag constituting securing means when the aforesaid open end is folded over to close the bag.

2. A bag comprising a tubular blank sealed at one end and having its rear face extending at the other and normally open end beyond the end edge of the front face, and an adhesive on the outside of the extension of said rear face constituting securing means when the said open end is folded over to close the bag.

JOHN M. DRIVER.

(No Model.)

M. E. McCOY.

BAG FASTENER.

No. 599,858.

Patented Mar. 1, 1898.

Fig. 1.

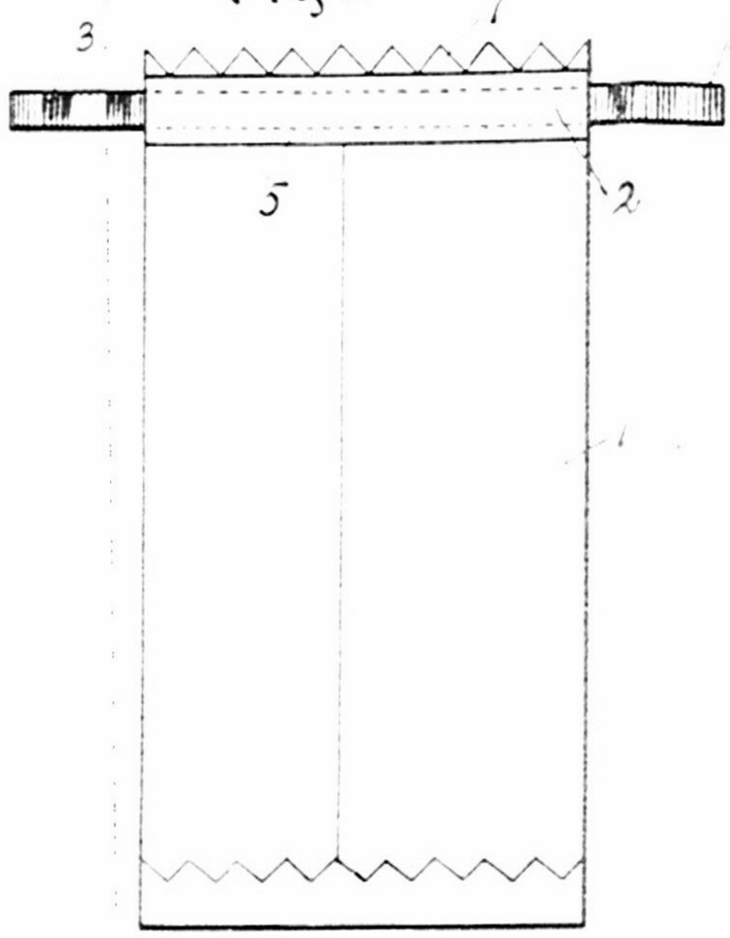


Fig. 2.

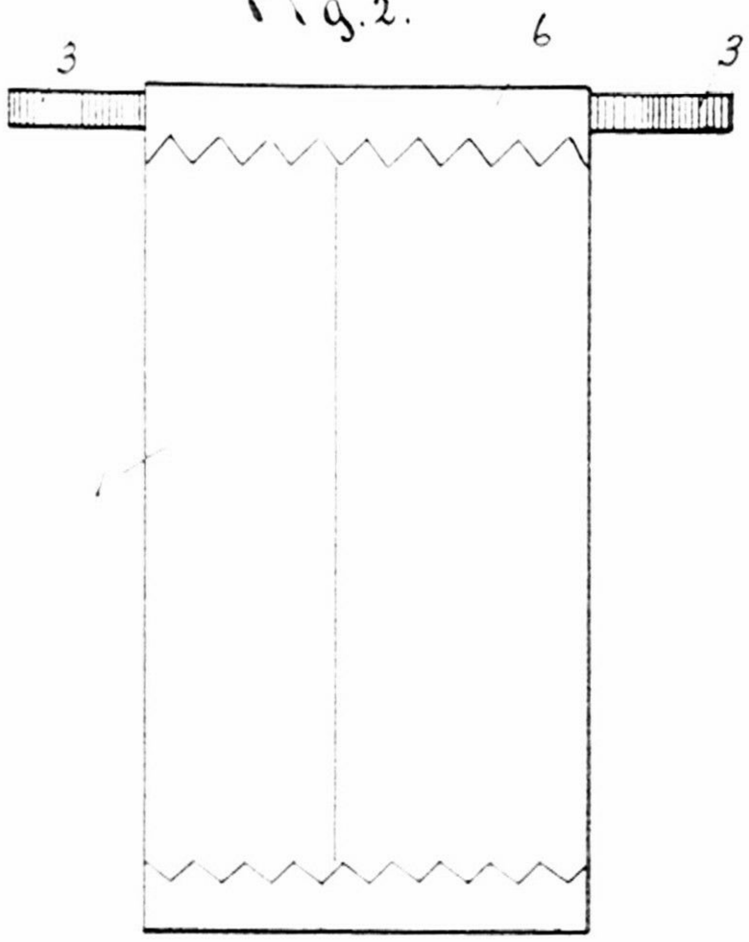


Fig. 3.

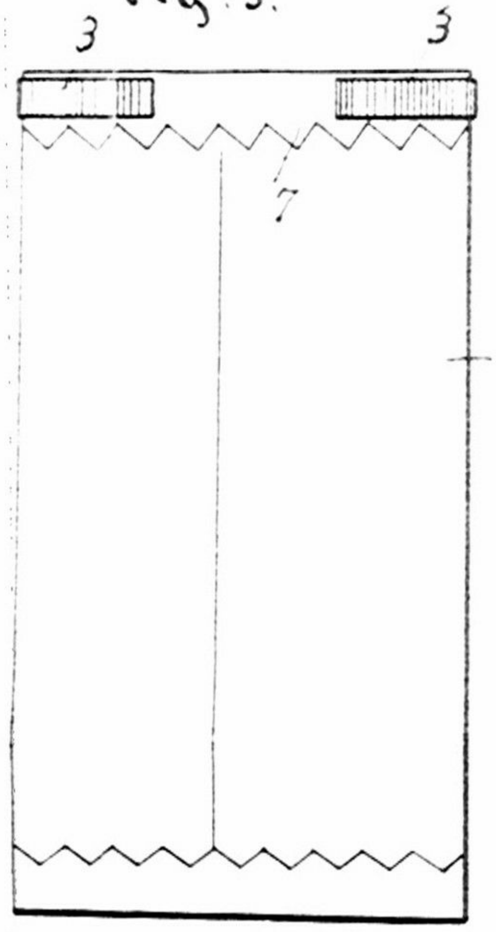


Fig. 4.

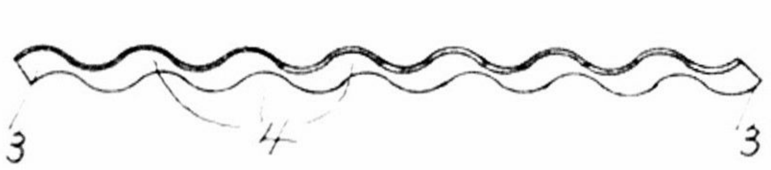
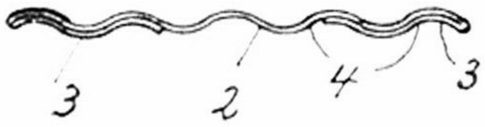


Fig 5.



Witnesses

S S Street

M.S. Hinman

Inventor.

Mamie E. McCoy

By N. B. Hagin, atty.

UNITED STATES PATENT OFFICE.

MAMIE E. McCOY, OF WICHITA, KANSAS.

BAG-FASTENER.

SPECIFICATION forming part of Letters Patent No. 599,858, dated March 1, 1898.

Application filed February 16, 1897. Serial No. 623,721. (No model.)

To all whom it may concern:

Be it known that I, MAMIE E. McCOY, a citizen of the United States of America, residing at Wichita, in the county of Sedgwick and State of Kansas, have invented certain new and useful Improvements in Bag-Fasteners, of which the following is a specification, reference being had therein to the accompanying drawings, and the figures of reference thereon, forming a part of this specification, in which—

Figure 1 is a side view of my improved bag-fastener. Fig. 2 is a side view of the same, showing the manner of folding the bag. Fig. 3 is a like view of the same, showing the manner of securing the bag closed by the fastener. Fig. 4 is a perspective view of the bag-fastener; and Fig. 5 is an edge view of the same, showing how the crimped ends fold back in the crimps of the fastener.

This invention relates to certain improvements in bag-fasteners; and it consists of a flat piece of metal crimped and secured across the open end of the bag with the ends of said crimped metal extending beyond the edge of the bag.

Referring to the drawings, 1 represents a bag or sack.

2 represents my improved fastener, having the ends 3 extending out from the bag. 4 represents said fastener crimped along its entire length. 5 represents a strip pasted over said crimped-metal strip, securing it to the bag. Said strip may be secured to the bag by any other suitable means.

6 represents the open end 7 of the bag turned over as it would be folded in closing the bag, which fold may be repeated as many times as desired to fold the bag down to the contents of said bag. For example, if the bag should only be half filled, the end of the bag would be folded over and over, down to the contents of the bag, after which the ends 3 would be bent around the bag, as shown in Fig. 3. By the crimps 4 fitting into one another, as shown in Fig. 5, said fastener will hold much more securely than it would if the crimps were omitted. By having the crimps 4 in the fastening 3 they prevent said fastener from slipping out from the fastening 5.

Having thus described my invention, what I claim as new and useful, and desire to secure by Letters Patent, is as follows:

1. The herein-described bag-fastener consisting of a piece of crimped metal secured to said bag parallel with and near the open end, with the end of said fastener extending out from the bag, said metal adapted to bend.

2. The herein-described bag-fastener consisting of a piece of crimped metal secured to said bag near the open end, and parallel with said open end, by the strip 5, the end of said crimped-metal strip extending beyond the edge of said bag, and adapted to bend.

MAMIE E. McCOY.

Witnesses:
O. MULVEY,
THOMAS G. HOSS.

81

G. F. HOGAN.
ENVELOP.
APPLICATION FILED JAN. 7, 1919.

1,359,063. Patented Nov. 16, 1920.

Fig. 1,

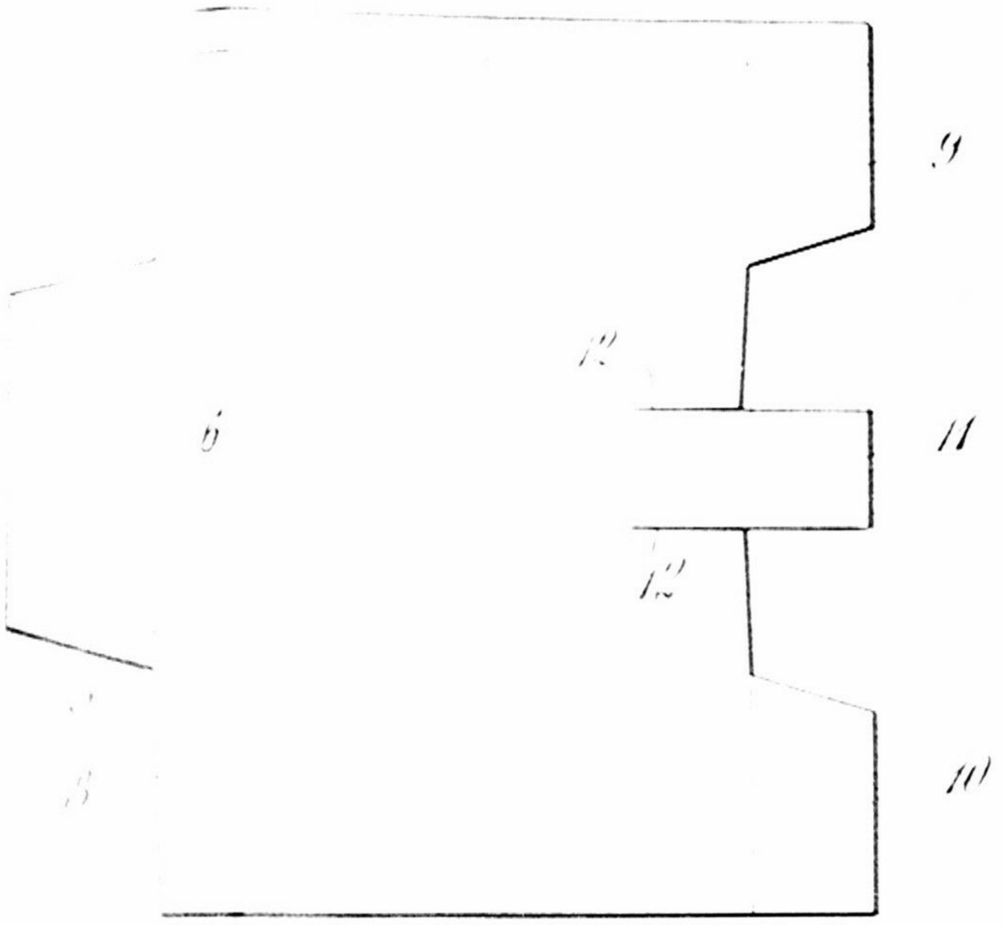


Fig. 2,

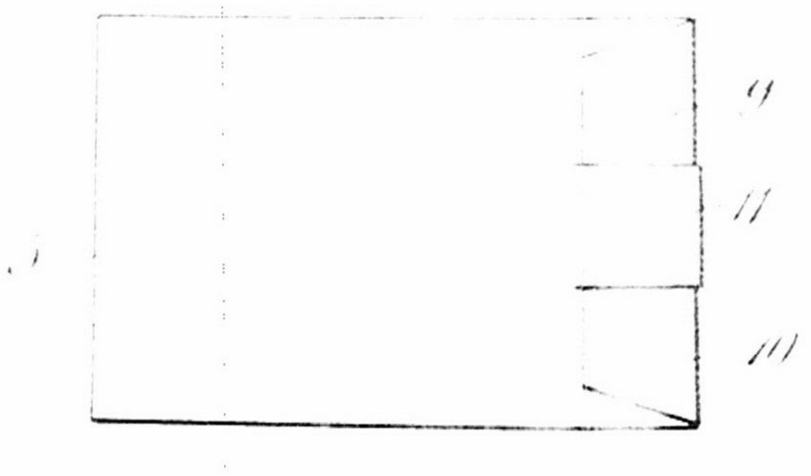


Fig. 3,

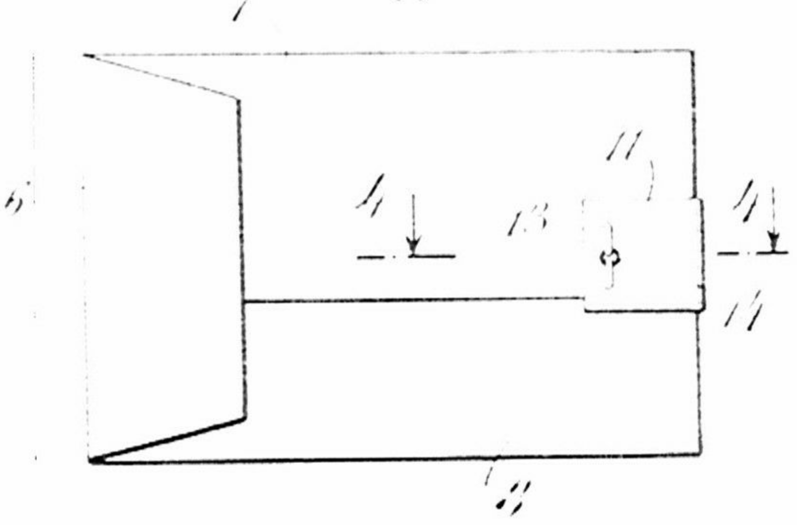
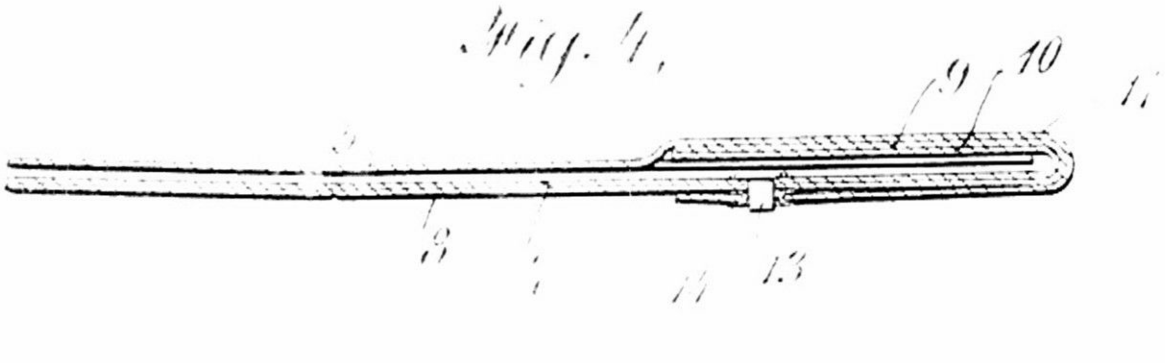


Fig. 4,



Inventor:
G. F. Hogan
By his Attorneys
Pennie, Davis, Marvin and Edmonds

UNITED STATES PATENT OFFICE.

GEORGE FRANCIS HOGAN, OF CHICAGO, ILLINOIS.

ENVELOP.

1,359,063. Specification of Letters Patent. Patented Nov. 16, 1920.

Application filed January 7, 1919. Serial No. 269,978.

To all whom it may concern:

Be it known that I, GEORGE FRANCIS HOGAN, a citizen of the United States, residing at Chicago, in the county of Cook, State of Illinois, have invented certain new and useful Improvements in Envelops; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The present invention relates to envelops of the non-sealing type, and it proposes an envelop of the character indicated which may be closed in such a way as to effectively protect its contents while still permitting the envelop to be sent through the mail with merchandise postage.

According to the invention, the envelop is constructed of a single blank of paper or other suitable sheet material, the component parts of which are folded together, and one of such parts, forming an end flap, is secured in the usual way to the back of the envelop, while the other end is closable by a flap formed by two extensions from the top and bottom flap joined at their edges, which is itself folded and held in closed position by a tongue which is formed on the body or front end of the envelop, and folded over and detachably fastened to the joined edges of the top and bottom flaps which form reinforcements. In this way, the envelop is securely closed and its contents thereby protected, without, however, utilizing a permanent seal of any character, the construction and arrangement of the tongue enabling it to be detached from the reinforcement formed by the edges of the top and bottom flaps when occasion arises.

The accompanying drawing shows one form which the invention may take in practice, and therein:

Figure 1 is a plan view of the blank from which the envelop is constructed; Fig. 2 is a front view of the envelop in closed condition; Fig. 3 is a rear view thereof; and Fig. 4 is an enlarged detail section on line 4—4 of Fig. 3.

Referring more particularly to the drawings, the improved envelop is constructed from a blank of paper or like sheet material which, as shown in Fig. 1, comprises a rectangular body portion or member 5 provided at one end with a flap 6, and at its top and bottom edges with flaps 7 and 8. The body 5 forms the front of the envelop and, as usual, receives name and address of the person to whom the envelop is to be sent. The back of the envelop, instead of being formed by a single member, is formed of the two flaps 7 and 8, which are folded over against the rear face of the body 5, with their free longitudinal edges overlapping and forming a reinforcement, one or the other of these flaps having applied to it a suitable adhesive to hold them in the position indicated. The end flap 6 is then folded over and pasted to the flaps 7 and 8, thereby closing the envelop at one end.

The other end of the envelop is closed by a flap which, instead of being of unitary construction, and forming an integral part of the front member or body 5, as is ordinarily the case, comprises two parts or sections 9 and 10 which are integral with the top and bottom flaps 7 and 8, respectively, and form continuations of one end thereof, as illustrated in Fig. 1. When the latter flaps are folded over and pasted together as above described, the extensions 9 and 10 are likewise brought into overlapping relation, and they likewise are fastened together by the adhesive, forming a thickened portion in the way of a reinforcement already referred to. It is intended that this compound flap 9, 10 be folded against the outer or front face of the body 5, and to permit this disposition of said flap, while at the same time providing means for detachably holding it in folded or closed position, the adjacent ends of the body are furnished with an integral fastening tongue 11. The latter, as will be understood, projects beyond the body 5 for a distance at least as great as the width of the flap 9, 10, and the body is slit at the points where it is joined by the tongue, as indicated at 12 in Fig. 1, thereby approximately doubling the length of the tongue. Consequently, the compound flap can be folded over between the tongue and the body, and the tongue then folded, in turn, over against the rear flap 7, as represented in Figs. 3 and 4, thus the flap and the tongue present at certain portions of the envelop and at the edge thereof reinforcing and stiffening parts.

To retain the tongue in the position indicated, any desired type of fastener may be utilized, that shown comprises a two-armed metal clip 13 of known form, which is affixed to the flap 7 and inserted through a metal eyelet 14 secured to the end portion of the tongue, the exposed portions of the arms of the clip being spread out against the tongue in the ordinary manner.

It will be understood from the foregoing, that the envelop may be readily closed and fastened in a manner to effectively protect its contents against loss, while at the same time avoiding the use of a permanent seal of any character, and that, when desired, the tongue may be readily disengaged from the fastener 13, after which the end flap 9, 10 may be folded back to permit access to the contents of the envelop.

I claim as my invention—

An envelop, comprising, in combination, a body provided at one end with a flap and also provided with flaps at its top and bottom edges, the top and bottom flaps being folded against the inner face of the body in overlapping relation and forming a reinforced portion, and the end flap being folded over and secured on the outer face of said overlapping top and bottom flaps, means on said top and bottom flaps for releasably closing the other end of the envelop by being folded over the exterior thereof, fastening means carried by said reinforced portion, and an integral fastening tongue on said body and formed in part therefrom and adapted to be folded over said closing means and detachably fastened to said reinforced portion, substantially as described.

In testimony whereof I affix my signature.

GEORGE FRANCIS HOGAN.

J. M. SULLIVAN.
CONTINUOUS BAG.
APPLICATION FILED MAY 10, 1915.

1,279,171. Patented Sept. 17, 1918.

Fig. 1.

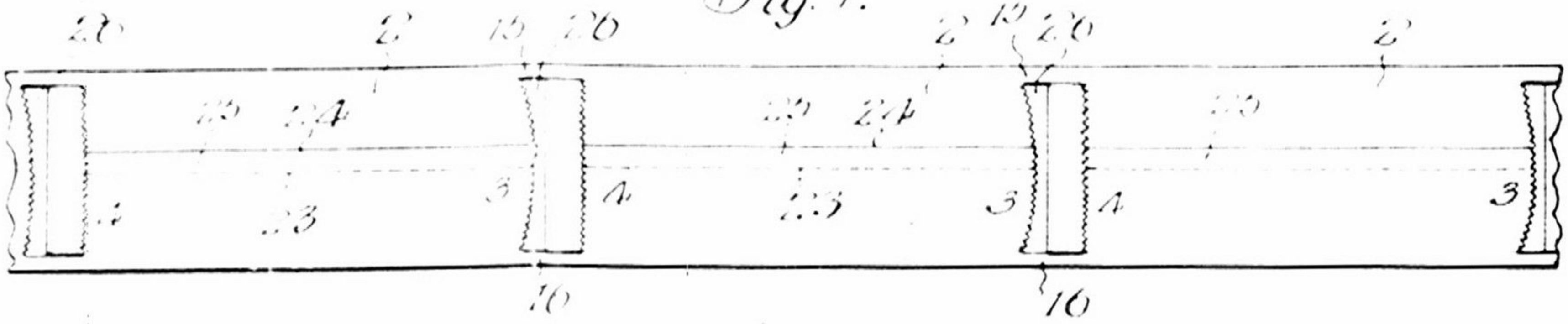


Fig. 2.

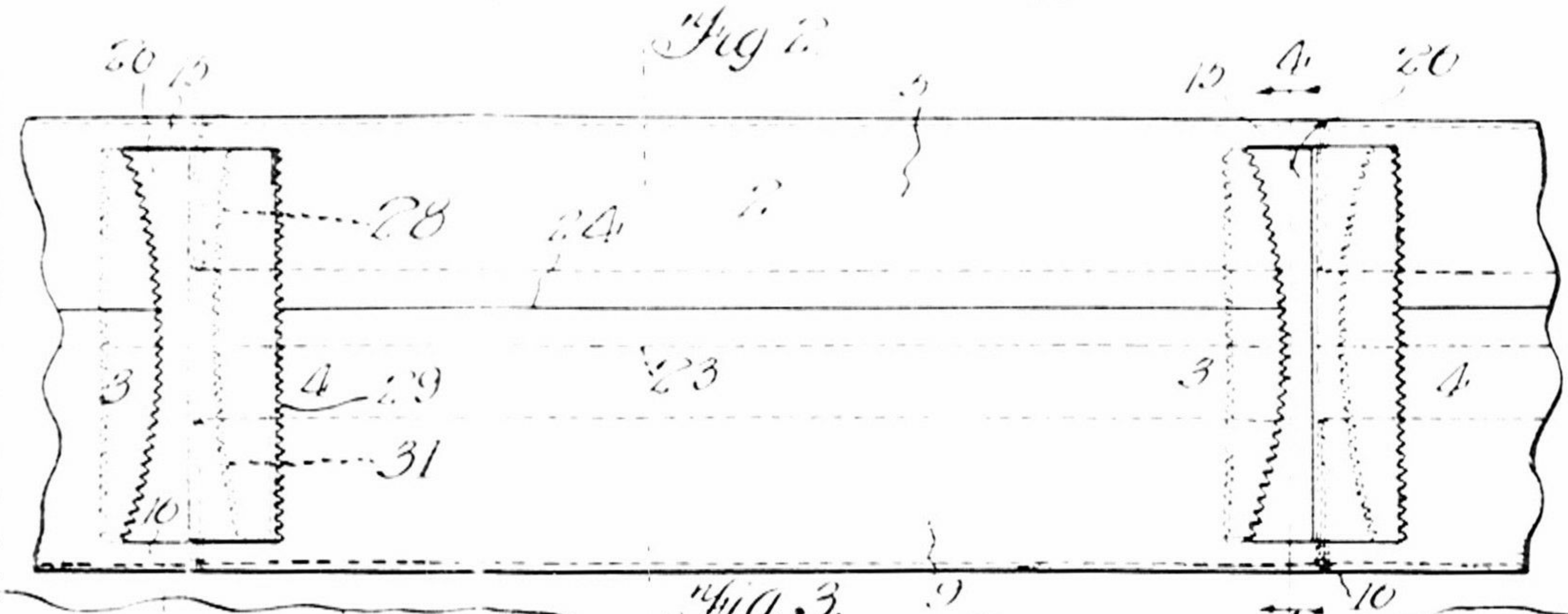


Fig. 3.

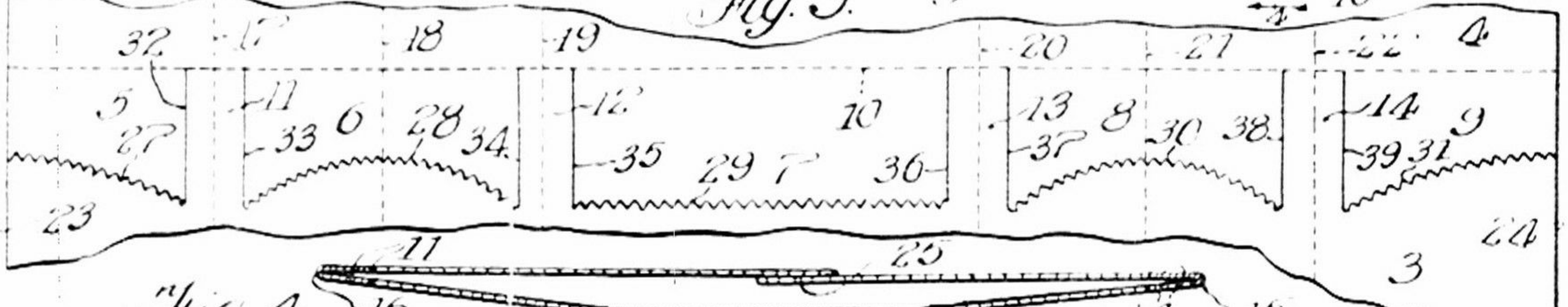


Fig. 4.

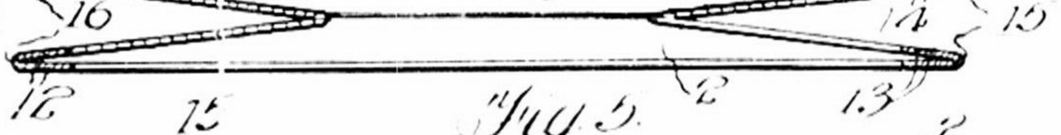


Fig. 5.

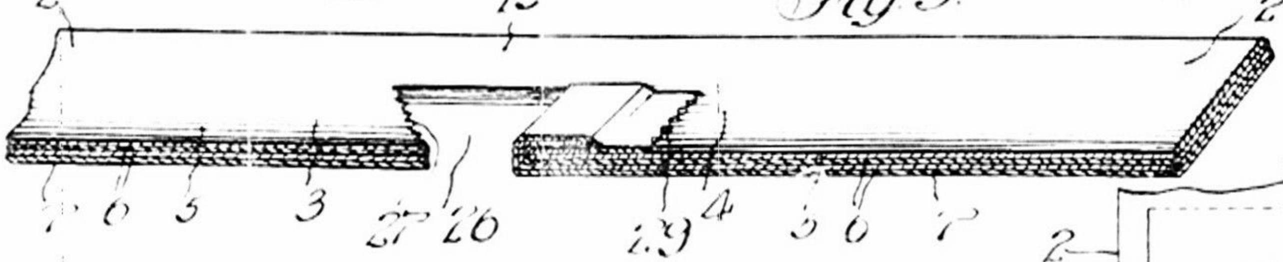


Fig. 6.

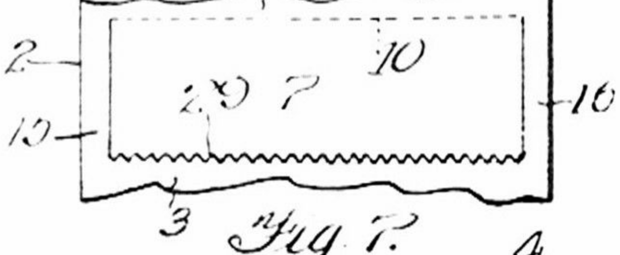


Fig. 7.

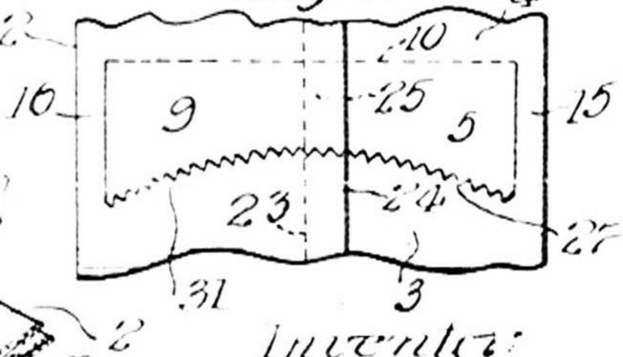
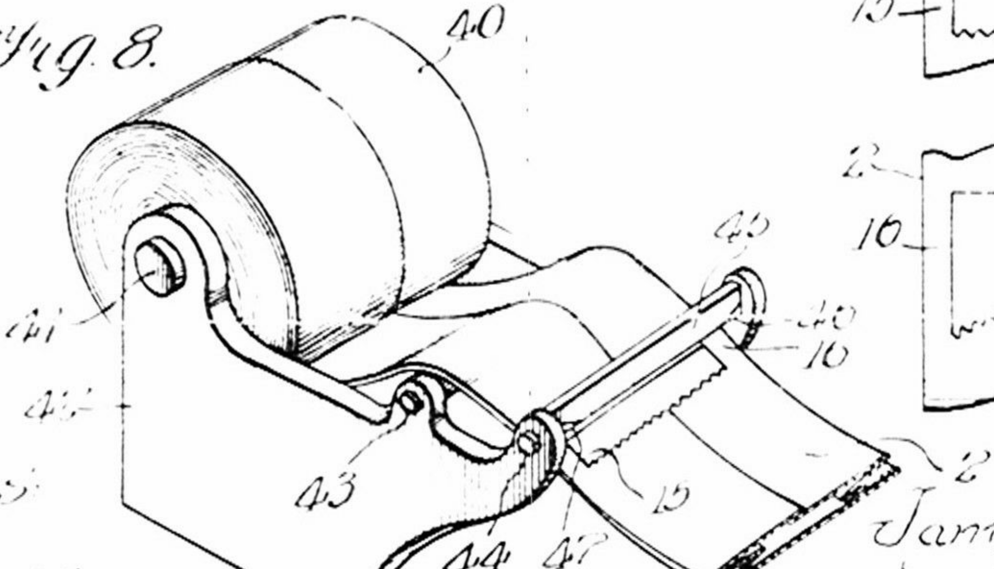


Fig. 8.



Witnesses:
A. J. Sauser

Inventor:
James M Sullivan
by [illegible]
Atty.

UNITED STATES PATENT OFFICE.

JAMES M. SULLIVAN, OF CHICAGO, ILLINOIS, ASSIGNOR TO STANDARD PAPER BAG COMPANY, A CORPORATION OF SOUTH DAKOTA.

CONTINUOUS BAG.

1,279,171. Specification of Letters Patent. **Patented Sept. 17, 1918.**

Application filed May 10, 1915. Serial No. 26,939.

To all whom it may concern:

Be it known that I, JAMES M. SULLIVAN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Continuous Bags, of which the following is a specification.

My invention relates to paper bags and has particular reference to a convenient, compact and economical handling and storage of same. The general object of the invention is to make it possible to commercially and practically provide paper bags in the form of rolls, from which bags may be stripped or cut in the same manner as sheets of paper are stripped from rolls of paper.

With this object in view the invention consists in the novel construction of bags in the form of strips, their combination, arrangement, and mounting, all as hereinafter described in detail, illustrated in the accompanying drawing and incorporated in the appended claims.

In the drawing—

Figure 1 is a plan elevation of a series of bags torn away from a continuous strip of bags.

Fig. 2 is a similar enlarged view of one of the bags with broken away portions of bags adjoining both ends.

Fig. 3 is a section of a blank from which the bags are formed showing the adjoining top and bottom portions of adjoining ends of bags.

Fig. 4 is an enlarged section taken on line 4—4 of Fig. 2, the bag being slightly expanded instead of flat.

Fig. 5 is a perspective view representing in section and broken away a portion of adjoining bag-ends at one edge of a pair of bags showing the arrangement of the layers of paper folding upon each other.

Fig. 6 is a broken away portion of adjoining ends of bags, representing one side of the bags before the cut out portion is folded to close the bottom of one bag and make an opening at the top in the adjoining bag.

Fig. 7 shows the reverse side of Fig. 6.

Fig. 8 is a perspective view of a roll of bags mounted together with a holder provided with a cutting knife for severing the bags from each other.

In the several views 2 represents the body of an ordinary paper bag exclusive of its ends involved in this invention, the top end being designated as 3 and the bottom as 4, the same numerals 3 and 4 representing in Fig. 3 the portions of the ordinary bag body which immediately adjoin the ends of the bag in which the present improvements in the continuous bag construction take place.

Fig. 3 shows five cut out sections 5, 6, 7, 8 and 9 which when folded upward and pasted onto the part 4 and to each other as in Fig. 5, form the closer laps for the bottom of the bag. These sections 5 to 9 are separated by strips 11, 12, 13 and 14 which connect the ordinary bag-body parts 3 and 4 in the forms of finished bag strips 15 and 16 after the Fig. 3 blank has been folded on the vertical dotted lines 17, 18, 19, 20, 21, and 22. To produce the ordinary paper bag the end of the ordinary paper bag blank that is to the right of the line 22 is, looking at Fig. 3, folded forward on the line 22 to lie over the line 21. These two layers are then folded back on the line 21, and the resultant three layers are folded forward on the line 20. Starting the folding at the left hand end of Fig. 3, the part to the line 17 is folded forward on the line 17, the resultant two thicknesses are folded backward on the line 18, and the resultant three thicknesses are folded forward on the line 19 causing the ends—23 and 24—of the blank to meet and overlap in the pasted "seam"—25—of the bag. The parts 11, 12, 13 and 14, each of which is folded longitudinally upon itself as indicated by the dotted lines in Fig. 3, have their layers pasted together where they meet. As shown in Figs. 6 and 7 the partly cut out part 7 is at one side of the bag, the parts 5 and 9 at the opposite side with the upon themselves folded parts 6 and 8 in between. The layers of cut out portions thus arranged are pasted together and the entire body of layers as they appear in either Fig. 6 or Fig. 7 is then folded upward on the dotted line 10 against the body portion 4 to which said body of layers is pasted, leaving an opening 26 between the adjacent ends of the bags. The lower lines of severance are zig-zag, serrated, or toothed and are labeled 27 to 31 while the parallel and straight lines are numbered 32 to 39.

In Fig. 8 is shown a string or strip of bags in the form of a roll 40 mounted on a spool

41 journaled in a stand 42 carrying guide rollers 43 and 44 and a blade 45 having beveled knife-edge portions 46 and 47 under which the connective parts 15 and 16 are brought and severed by pulling upward on the projected bag 2. The particular details of the mounting frame and certain conveniences for separating each individual bag from the roll will form the subject matter of a separate application and form no part of the present invention.

These rolls of bags may be mounted in stands or cabinets containing rolls of plain paper, or separate cabinets for assorted sizes of paper bags may be provided. In either the annoyances and inconveniences of loose and bulky stacks of individual bags are avoided, and the handling and supplying of bags made just as convenient as the handling of plain wrapping paper in the form of rolls. Several thousand bags in this form may be mounted in a comparatively small cabinet or skeleton stand. In the manufacture of paper bags rolls time and money is saved by eliminating the individual handling and substituting a single strip of indefinite length.

I claim as my invention—

1. A plain strip of paper folded having incisions within the margin of the folded strip and the incised portions folded and pasted to form a chain of bags.

2. A strip or chain of bags formed out of a strip or length of paper having a series of incisions within the margin of the folded strip, the incised portions being folded to form end-closers for the individual bags, the margins at said incisions forming connective strips for adjoining bags.

3. A plurality of bags formed out of a strip of paper having cut portions all of which are utilized and form closers for the ends of the individual bags and connective ligaments for the adjoining tops and bottoms of the individual bags of a chain of bags, said ligaments being uncut margins of said strip.

4. A chain of bags formed out of a strip of paper having side portions folded onto the intermediate portion to form the bodies of the bags and having partly cut out parts which are folded to form bottom closing laps sealed onto the bodies of the bags leaving connective strips at the edges of the bags which join their ends.

5. A chain of connected bags formed by cutting, folding and pasting parts of a strip of paper, all of the width of said strip being utilized to form bottom closing overlaps and marginal end connecting strips between the individual bags.

6. A chain of bags formed out of a strip of paper with continuous parallel edges, portions adjacent to said edges being folded toward each other upon the intermediate portion and joined to form the body of each bag, and incised portions between the ends of the individual bags which form bottom closing laps for the individual bags and connective strips for adjacent bags, respectively.

In testimony whereof I have hereunto subscribed my name.

JAMES M. SULLIVAN.

SEARS, ROEBUCK AND CO.
925 S. HOMAN AVE.
CHICAGO
PHONE: KEDZIE 2500

Chicago 3/11/27 Ex 24

ORDER C 76460

Equitable Paper Bag Co.
318 Scholes St.
Brooklyn, N.Y.

Ship to As specified

Mark for Store Room S.R.5

Above Numbers Must Appear on All Packages and Invoices

Via F. O. B. Destination Terms 2%-10 days Charge Dept.

Quantity	
200 M	Packeting Bags 10 x 12 -2½ flap @ $2.10 M To be made of 30 lb. Sulphate Kraft, envelope type, ungummed flap , printed brown ink on one side, we to furnish one electro. Pack flat 1 M to the bundle. Make up at once and hold subject to our shipping instructions all to be taken within six months. Above order subject to your submitting an envelope from the run for our O.K.

[illegible] 11/18/33

Pack 500 - 500
1 Bdl
Dev
ask [illegible]

IMPORTANT—Use Fibre, Corrugated or Veneer Boxes for Packing on all merchandise where its nature does not demand a heavy wooden box. Bale or crate all articles where it is customary. Fibre and Corrugated Boxes must bear the Box Maker's Certificate and the Bill of Lading must be so certified.

Acknowledge order and advise shipping date—unless immediate shipment is made.

Original Shipping Receipt must be mailed to our Receiving Dept. as soon as goods are shipped.

Order Subject to Conditions on Front and Back of This Sheet 180

All correspondence relative to this order must be addressed to SEARS, ROEBUCK AND CO., SUPPLY DEPARTMENT. Mention order number.

SEARS, ROEBUCK AND CO.
A.R. McConnell Purchasing Agent.
Per Bell Buyer.

F4373 (OVER)

CONDITIONS

We reserve the right to countermand this order, or any part thereof, if shipment is not made on date specified.

Goods purchased are subject to our inspection and approval. If rejected, they will be held subject to your order and returned at your expense.

All installation work subject to the inspection and approval of an authorized representative of this Company.

Seller guarantees to protect and indemnify us from any claims or demands on account of any injury to person or property occurring during the installation of any work called for in this order.

Seller agrees to indemnify us against all claims, damages, or expense resulting from any patent litigation in connection with the articles purchased.

No charge for packing, boxing or cartage will be allowed unless specified.

All telephone orders must be confirmed.

SEARS, ROEBUCK AND CO.

(OVER)

FOR MR. CHIEF JUSTICE MARTIN

COURT OF APPEALS
DISTRICT OF COLUMBIA
FILED
DEC 1 - 1933
Henry W. Hodges
CLERK

Court of Appeals

of the
DISTRICT OF COLUMBIA

April Term, 1933

EQUITABLE PAPER BAG COMPANY, INC., Appellant, vs. CONWAY P. COE, Commissioner of Patents, Appellee.	No. 6035.

APPELLANT'S BRIEF

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INDEX

Subject Matter

Page
The Poppe Invention 2
The Commercial Background of the Invention 4
The Prior Art 6
The Grounds of Rejection—1. No Invention Over Prior Art 8
Grounds of Rejection—2. Improper Article Claims 9
Grounds of Rejection—3. Double Patenting 17

Decisions Cited

In re Burt, et al., 58 App. D. C. 7; 24 F. (2d) 273 21
Dunn Wire-cut Lug Brick Company v. Toronto Fire Clay Company, 259 Fed. 258 13
General Electric Company v. P. R. Mallery Company, 298 F. 579 19
Oval Wood Dish Company v. Sandy Creek New York Wood Mfg. Company, 60 Fed. Rep. 285 19
In re Shollenberger, 51 App. D. C. 332; 279 Fed. Rep. 314 8
In re Sorum, 49 App. D. C. 360; 265 Fed. Rep. 1000 8
Standard Brands, Inc. v. Federal Yeast Corporation, 38 F. (2d) 329 20
Union Carbide Co. v. American Carbide Co., 181 Fed. 104 11
In re Zenk, 50 App. D. C. 25; 267 Fed. Rep. 327 8

Court of Appeals

OF THE

DISTRICT OF COLUMBIA

EQUITABLE PAPER BAG CO., INC., Appellant, vs. CONWAY P. COE, Commissioner of Patents, Appellee.	No. 6035.

APPELLANT'S BRIEF.

MAY IT PLEASE THE COURT:

This is an appeal from a decree of the Supreme Court of the District of Columbia dismissing a bill in equity under Section 4915 of the Revised Statutes brought against the Commissioner of Patents for refusal to grant a patent to the appellant, Equitable Paper Bag Co., Inc., on an application by George W. Poppe, Serial No. 435,844, filed March 14, 1930; division of an application filed November 1, 1928, now patent No. 1798168 (Plaintiff's Exhibit 2, Rec. p. 50, *et seq.*).

A patent has been refused on the following grounds:

1. No invention over the prior art.
2. Improper article claims.
3. Double patenting.

The Court below concurred in the holding of the Patent Office on all of these grounds (R. pp. 8, 9).

THE POPPE INVENTION.

The invention sought to be protected by the application here in suit is a bag-envelope which can be made on a bag machine but which nevertheless possesses certain desirable characteristics heretofore found only in envelopes.

The application seeks to obtain claims on the *article* as distinguished from the *various* processes by which it may be produced.

The article which it is sought to protect by patent has received widespread acceptance in the commercial field. The first sale of two hundred thousand of these bag-envelopes was made in 1927 and the growth of sales has been so great that in 1932 one hundred twenty million were made and sold (R. pp. 33, 34).

The president of the Equitable Paper Bag Co., Inc., testifying in the Court below on January 18, 1933, stated that at that time the company had unfilled orders on its books for approximately sixty million more of these bag-envelopes.

There is no question but that the bag-envelope sought to be protected is a *new* commercial product.

There is no question as to its marked utility as evidenced by the very great and immediate commercial success that it has enjoyed.

No patent relied upon by the Patent Office describes nor even suggests the new article.

The Poppe patent No. 1798168 dated March 31, 1931 (Plaintiff's Exhibit 2, R. p. 50 *et seq.*) covers one process and apparatus by which the new bag-envelope may be produced.

The Poppe patent No. 1851060 dated March 29, 1932 (Plaintiff's Exhibit, R. p. 63 *et seq.*) covers a different process and a different machine by which the *same* article may be produced.

The sole question to be determined is Poppe's right to a patent on the article.

The Constitutional basis for the grant of patents reads as follows:

> "The Congress shall have power * * * to promote the progress of science and the useful arts by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries" (Article I, Section 8).

I wish to invite your Honor's attention to the word "securing."

If Poppe is to be *secure* in his rights he should be granted such claims in the present application as will protect him against colorable variations from the particular processes of producing his new and very useful article shown and described in his patents 1798168 and 1851060, above referred to.

Other methods may be devised which will produce the same article, which article has had and is still having extended commercial use, and unless the applicant is allowed to claim his article without reference to any particular process by which it is produced he will not have *secured* to him that protection which it is the intent of the law to give.

The applicant is the first to produce a bag-envelope *made from a tube* as distinct from an envelope made from a web or from a blank, said bag-envelope having a long closing flap with smooth side edges.

To appreciate what this means to the commercial art I shall briefly discuss the historical background of bag-making as distinguished from envelope-making.

THE COMMERCIAL BACKGROUND OF THE INVENTION.

The practical art makes a very clear distinction between envelopes and bags, due largely to the difference in the processes employed in their making and the apparatus by which they are produced. The ordinary envelope such as illustrated by Plaintiff's Exhibit 6, is an expensive article to make for three reasons:

(a) the machinery used costs more than twice as much as a machine for making ordinary bags;

(b) the speed at which an envelope machine can be run is about half that at which a bag machine may be run;

(c) in the making of an ordinary envelope such as Exhibit 6, there is about 12% waste of paper.

As explained by Mr. Poppe (R. p. 17), an envelope is made by first cutting into the edges of a web of paper and removing the irregularly shaped pieces, such as those attached to and forming part of Exhibit 6. The side flaps are then folded over and the bottom flap pasted. Both top and bottom flaps fold upon the same side of the envelope, thereby leaving a plain face for printed matter. This manner of cutting the web necessitates waste. In applicant's bag-envelope there is *no waste*. This waste in an envelope of the size of Plaintiff's Exhibit 5 amounts to one and five-eighths inches of paper for each envelope.

Paper bags, on the other hand, are made by first folding a web of paper to form a *bag tube* and bag lengths are cut successively from said tube in such a manner that the opposite walls are offset longitudinally. There is no waste of paper in such a bag and such bags have been in use for more than half a century, but prior to the Poppe invention there was no commercial bag produced which had a closing flap of sufficient length and shape to form a complete and operative closure for the bag mouth and protect the corners of the bag. The bags in commercial use were of the kind such as shown by Plaintiff's Exhibit 4, a flat notion bag, or Plaintiff's Exhibit 17, known as a bellows bag. The Court will note that the upper lip of these bags is not intended to be folded over to close the mouth of the bag but, on the contrary, serves merely as a thumb hold by which the bay may conveniently be opened. Hence the bags heretofore in use were not acceptable for many kinds of merchandise and therefore envelopes were the only type of receptacles available for such merchandise, until the advent of the Poppe bag-envelope.

The trade, however, demanded a paper receptacle having a long closing envelope-like flap. Such an article, to be of commercial value, must be manufactured at low cost. Poppe supplied that article by devising means to produce a long lip *closing* flap on an ordinary bag made from a *tube without waste* and at a speed equal to that at which an ordinary bag is made. He supplied a decided want and protection should be given him for the new article itself, regardless of the particular process by which it is made.

THE PRIOR ART.

The British patent to Vanderlip No. 9156 (R. pp. 72, 73) discloses an envelope made from a *blank* and not an article made from a bag tube. Such an article could not be made from a bag tube because the part 7, Figure 5, does not fit the notch in the upper side of the blank.

From an examination of plaintiff's physical Exhibit 5B which is a Poppe bag-envelope with the bottom opened out, it will be observed that the closing flap exactly fits the cut-out portion at the bottom of the bag so that by forming the Poppe bag-envelope from a bag tube it can be made without waste.

The Hogan patent No. 1,359,063 (R. pp. 81-83) is similar to the Vanderlip envelope; is made from a blank and not from a bag tube and there is necessarily waste in its production.

The patent to Driver, No. 1,661,884 (R. pp. 77, 78) is an ordinary flat notion bag, a sample of which is in evidence as plaintiff's physical Exhibit 20. This bag is an ordinary notion bag having a slightly extended lip for the purpose of a thumb hold to permit the bag to be conveniently opened. It does not possess and is not intended to possess a closing flap.

The British patent to Hazeltine No. 1622 of 1873 shows a construction which is exemplified by plaintiff's physical Exhibit 17. This is an ordinary grocery bag, the upper portion of which is made into a thumb hold in order that the bag may be flopped open by a quick movement when it is desired to use the bag.

The bag-envelope upon which a patent is sought differs from an ordinary envelope such as is common in the art and such as is exemplified by the Vanderlip patent or the Hogan patent in that it is made from a tube without waste, while the envelopes of Vanderlip or Hogan are made either from a blank with waste, or from a web by first cutting out portions of the web which also constitutes waste and thereafter folding the web to form the envelope.

The Poppe bag-envelope differs from an ordinary paper bag in that it possesses a long *closing* flap having smooth envelope-like side edges. No bag of the prior art suggests a structure having a long closing flap.

The "findings of fact" in the Court below (R. p. 8) are erroneous in that they do not state the complete facts. Paragraph 1 of these findings states that the Poppe bag has a *closing* flap, but paragraph 2 fails to state that the Sullivan and Hazeltine patents fail to show closing flaps. Paragraphs 3 and 4, discussing the Hogan and Vanderlip patents, fail to state that in both of these constructions there is waste of paper.

This waste of paper is of great importance when it is considered in what quantities these bags are produced and consumed. In a bag-envelope of the size of Plaintiff's Exhibit 5, the waste amounts to one and five-eighths inches for each one made. In three hundred million of the size shown in Exhibit 5 there is a *saving* in paper length amounting to more than *seven thousand, seven hundred fifty-four miles,* almost enough to reach through the earth from pole to pole.

THE GROUNDS OF REJECTION—1. NO INVENTION OVER PRIOR ART.

Notwithstanding this great saving in paper and the production of an article meeting a large public demand, and notwithstanding the fact that the prior art suggests nothing that is similar to the Poppe bag-envelope, the Patent Office has refused Poppe claims on the ground of no invention.

Certainly great commercial success coupled with saving of material tends to indicate patentability, especially where the new article is not suggested by the prior art.

This Court has repeatedly held that any doubt as to patentability should be resolved in favor of the applicant and has applied this rule in the following cases:

In re Sorum, 49 App. D. C. 360; 265 Fed. Rep. 1000.

In re Zenk, 50 App. D. C. 25; 267 Fed. Rep. 327.

In re Shollenberger, 51 App. D. C. 332; 279 Fed. Rep. 314.

In view of the foregoing, the ground of rejection, based on no invention over the prior art, is without any logical basis.

GROUNDS OF REJECTION—2. IMPROPER ARTICLE CLAIMS.

The claims refused by the Commissioner of Patents are produced in their entirety in the Examiner's Statement (R. pp. 41-43). For the purpose, however, of discussing this second ground of rejection, claims 6 and 10 may be considered as illustrative and are as follows:

> 6. As an article of manufacture, a bag envelope, machine made from a bag tube and having a front wall and a rear wall, a bottom flap formed as a prolongation of the front wall and folded over the rear wall, a closing flap formed as a prolongation of the rear mall and foldable over the front wall, said latter flap having a serrated end edge and non-serrated side edges.
>
> 10. As an article of manufacture, a bag envelope, machine made from a bag tube and having a closing flap possessing machine cut side edges of substantial length.

The Court below followed the Patent Office in its holding that the phrase "machine-made from a bag tube" found in the above-quoted claims, were article claims defined by *the method* of making the bag (R. pp. 8, 9).

This phrase "machine-made from a bag tube" identifies the raw material, so to speak, out of which the bag-envelope is made and it distinguishes it from the ordinary envelope cut from a web and afterwards folded.

It is urged that the Court below erred in finding that such phrase defines *the* method of making the bag-envelope of the Poppe invention.

The Poppe specification reproduced in the record, pages 37 to 40, describes the manner in which the article is made and two methods of making it are described and shown. In Figure 1 (R. p. 48) slits 110, which are to constitute the edges of the closing flap of the finished bag, are made at bag length intervals in the web prior to folding. After folding it is chopped into bag lengths such as indicated at 120, Figure 1. The finished bag is shown in Figure 2 and is exemplified by plaintiff's physical Exhibit 5A.

A second method of producing the Poppe bag-envelope is shown in Figure 3 (R. p. 49) in which the slits 130, which are to constitute the side edges of the closing flap, are formed at an angle to the longitudinal movement of the web. The finished bag is shown in Figures 6 and 7 and is exemplified by plaintiff's physical Exhibit 5.

The details of the apparatus by which the bag-envelope is made according to either one or the other of these methods is described in the Poppe patent No. 1798168 (R. pp. 50 to 60, inclusive). The particular process by which the bag is made is claimed in said patent, claim 1 of which reads as follows:

> 1. The method of making an envelope bag, which comprises taking a bag tube, which tube has longitudinal cuts at intervals in the length thereof, and severing both walls of the tube along lines which connect both ends of the cuts.

It is manifest that the phrase "machine made from a bag tube" does not define any such process as is defined by the above quoted claim. The phrase is merely a description of a structure characteristic of bags as distinguished from envelopes and is so understood by those skilled in the art. It is no more a method step than such phrases as "a planed board," "a plastered ceiling," "an inflated balloon," and many similar phrases occurring in claims of many patents.

Not only are patents having claims containing similar phrases allowed by the Patent Office but such claims are sustained as valid by the Courts where it is apparent that a real advance in the art has been made. A very pertinent example of the Court's attitude towards such claims is expressed in

> *Union Carbide Co.* v. *American Carbide Co.*, 181 Fed. 104.

The case involved the infringement of a patent on a product, the claim of which read as follows:

> "As a new product, crystalline calcium carbide existing as masses of aggregated crystals."

The attempt was made to defeat the patent on the ground of no invention because calcium carbide was well known in the amorphous state and of course crystalline substances of all kinds were very old. The Court might well have disposed of this case in the same manner that the Examiner has attempted to dispose of the claims of the Poppe application here in suit. The Court, however, gave consideration to the peculiar properties of the new product, the uses to which it was to be put and also to the *cheapness* with which it could be manufactured. The Court said:

> "But patentable novelty in a case like the present may be founded upon superior

> efficiency; upon superior durability, including the ability to retain a permanent form when exposed to the atmosphere; upon a lesser tendency to breakage and loss; upon purity, and, in connection with other things, upon comparative cheapness. * * *
>
> "For these reasons it is held that the product possesses the requisite patentable novelty. And we must regard this conclusion as not only well founded in law, but as most just. To hold an important discovery which has given to the world a commercially new product—a product the high utility of which must be conceded—not entitled to protection for want of novelty, would, as it seems to us, be applying the patent statute to defeat its fundamental purposes."

Paraphrasing somewhat the Court's language, it is urged that Poppe has given to the world a commercially new product, a product of high utility and one which may be cheaply produced. In discussing this carbide case it may be further noted that the claim called for *crystalline calcium carbide*. It is well known that a crystalline substance is formed when solidification takes place under certain conditions. In other words, crystallization really defines a process step and crystalline defines a condition which results.

Applying this to the present case the phrase "machine made from a bag tube" is analagous to the use of the word crystalline in the carbide case. It defines a condition of the material from which the bag is to emerge but it does not define the particular process whereby the characteristic long sided smooth edge flap is produced. Likewise in the carbide case the claim is silent as to how the calcium carbide is made crystalline.

Another case even more exactly in point is

> *Dunn Wire-cut Lug Brick Company* v. *Toronto Fire Clay Company*, 259 Fed. 258.

The claim in suit read:

> "As an article of manufacture, a wire cut brick having wire cut ribs on the side thereof."

This claim not only refers to a wire-cut brick but likewise to the wire-cut ribs. Such a claim clearly includes *a* process step by implication although no *particular process*. As to this feature of the claim, the Court said:

> "Without regard to whether a patent upon a product may be wholly independent of any thought of the means by which it is produced, there can, in this case, be no such independence. Such degree of reference to the method of production is carried into the claim by the words 'wire cut ribs.'"

Bricks had originally been made by moulding or pressing in individual dies. It was later found that it was cheaper to squeeze the plastic clay through a die, shaped like a cross-section of the finished brick, and producing a continuous blank from which pieces could be cut. In the practical art, bricks made in this way were termed "wire cut bricks" whether the cutting was done by wire or other similar means.

It was found for use in paving that the bricks should not fit close together, and buttons or ribs were formed on the vertical faces of two adjacent bricks, and this was done in dies in which the pressing of the brick was also accomplished. The patentee Dunn devised a machine whereby wire cut brick could also be provided with wire cut ribs on the side and he, therefore, was able to produce a brick which immediately attained great public favor.

This case is very analogous to the present case because the method of extrusion of the clay and the wire cutting thereof is comparable to the formation of a bag tube and the severing of it into bag lengths, as has been heretofore practiced on bag machines.

The production of ribs or buttons on the bricks by moulding is analogous to the formation of long flaps on envelopes for the purpose of properly protecting the contents thereof: but envelopes are made by cutting from a single sheet or from a web and afterwards folding just as the single bricks were pressed and the ribs formed in the same way.

Dunn conceived the idea of making a brick having the desired characteristics of a die formed brick but in such a way that it could be produced on the wire cut brick machine and, therefore, at a cost very much below that of moulded brick.

Poppe has devised a bag having the desirable characteristics of an envelope with a long closing flap sufficiently protecting the corners of the bag, but which bag can be produced by bag methods and on a bag machine, and at a cost very much below that by which envelopes may be produced.

In holding the Dunn claim for a wire-cut brick valid the Court said:

> "Certain it is, in view of the weight of authority and the latest decisions, that the inventor of a new and useful product or article of manufacture may have a patent which covers it and gives a monopoly upon it, regardless of great variations in the method of making * * *. It is, therefore, the duty of the Court to find if it reasonably can, for a product patent some construction and scope which shall avoid, on the one hand, destroying its value—if not its validity—by confining it to the precise method of making which the patent has happened to show, and avoid, on the other hand, a construction so broad as to make it invalid because for an old product. As illustrated by the present case, if Dunn is confined to wire cut brick with wire cut lugs produced precisely as shown by him, the patent is commercially worthless because easliy avoided; while, if it is construed to cover a wire cut brick which, before burning, has had irregularities produced upon its face by any cutting or carving means whatever, it would be void because of common practice relating to all kinds of tile, brick and pottery."

Claim 10 of the Poppe application follows closely the language of the wire-cut brick claim. The phrase "machine made from a bag tube" is analagous to that part of the claim in the brick case which reads "a wire-cut brick." That part of claim 10 which reads "having a closing flap possessing machine cut side edges of substantial length" is analagous to that portion of the claim in the brick case reading "having wire-cut ribs on the side thereof."

Reverting to the last quotation from the wire-cut brick case, it is submitted that where a new and useful article has been produced it is the duty of the Court to grant to the applicant claims of such scope as will afford him adequate protection. The mere fact that Poppe has been granted a patent for one process of making his improved bag and another patent for a still different process should have no influence upon the question as to the patentability of the product when such product may be made by processes yet unknown and when the product itself is new and has demonstrated its great value and usefulness.

The protection afforded by patent 1,798,168, Plaintiff's Exhibit 2, is inadequate because it protects only a particular process and machine. The same is true of patent 1,851,060, Plaintiff's Exhibit 13.

The inadequacy of a process patent may be further emphasized by a consideration of the practical aspects of the matter. If a bag is sold in the trade having the characteristics of the Poppe bag, it cannot be with certainty determined whether such bag is made by the process of one or the other of the Poppe patents which have been granted or perhaps by some other process. In order to determine infringement it would be necessary to go into a competitor's plant and observe how the bag was made. This is frequently difficult, if not impossible.

GROUNDS OF REJECTION—3. DOUBLE PATENTING.

This ground of rejection is not pleaded in the answer and only vaguely hinted at in the Examiner's Statement and in the decision of the Board of Appeals, but since it was discussed in defendant's brief below, it is felt that the matter should be fully discussed here.

Double patenting can exist only where there are claims in different patents which secure to the inventor substantially the *same* scope of protection for the same invention. In such a case a second issued patent has been held invalid because if such patent in fact gives the same protection as the first, then to allow the second patent to stand would act to prolong the monopoly beyond the period allowed by the statute.

In order to have any basis whatever for refusing to grant the claims asked for in the present application it must be found that the same scope of protection is secured to the applicant in one or more of his prior granted patents as would be secured by the claims asked for in the present application.

A comparison of the claims of the Poppe patents, Exhibits 2 and 13, with any of the claims of the present application will show that the process claims *do not* secure to the applicant the invention that would be secured by the article claims.

The claims to the process found in the Poppe patent 1798168, Plaintiff's Exhibit 2, secure to the inventor one method of making the improved bag envelope, said method consisting in forming longitudinal cuts at intervals in a paper web, folding the web to form a tube and severing both walls of the tubes along lines which connect both ends of the slits.

The Poppe patent 1851060, Plaintiff's Exhibit 13, secures to the patentee that process of making his improved bag which consists in folding a web of paper to form a bag tube, slitting the tube at opposite sides and severing both walls of the tube along lines which connect opposite ends of the slits. In brief, patent Exhibit 2 covers the process of slitting *in the web* prior to folding to form a tube, while patent Exhibit 13 covers a process of folding the web to form a tube and *afterward* slitting the tube.

The bag envelope constituting Plaintiff's Exhibit 9 is not made by the process of either of the two Poppe patents above referred to, but by an entirely different process described and claimed in an application now pending in the Patent Office.

Therefore, since the same bag can be produced by at least three different processes it is manifest that no one of these processes can afford to the applicant that protection which is afforded by an article patent, whether said article be produced by any one of these three processes or by other processes yet unknown.

Since Poppe is the first to produce a *bag-envelope made from a bag tube* and having a long closing flap he is entitled to that scope of protection which will secure to him the full fruits of his inventive genius.

The decision

> *Oval Wood Dish Company* v. *Sandy Creek New York Wood Mfg. Company*, 60 Fed. Rep. 285,

which it is anticipated will be referred to by appellee, has no application to the facts of the present case for two reasons:

First, the Court sustained the *article* patent while holding the *process* patent invalid. Thus the patentee was given the benefit of the broader protection afforded by the article patent.

Second, the Court found as a matter of fact that the article could be produced *only* by the process claimed.

If, on the other hand, the Court had found as a matter of fact that the article could be produced by different processes they would undoubtedly have sustained the process patent as well as the article patent. This is in line with the view expressed by Judge Hough in

> *General Electric Company* v. *P. R. Mallery Company*, 298 F. 579.

Here the question of double patenting was raised and in regard to it the Court held:

> "That double patenting exists here (fourth subdivision of argument) is a new point of law. It rests on the fact that Just's original American application contained disclosure of several processes by which a single result—*i. e.*, the tungsten filament of the patent in suit—could be attained. The Office required division; the issue of the patent at bar was delayed for

> reasons sufficiently set forth in the Laco-Phillips opinion; but one divisional application, covering one process only, became No. 878,463 in 1908, four years before the master patent for the product came out of the Office; hence, it is said double patenting resulted. There would be force in the argument if there were but one process, and the only possible result thereof was the single product; but the more philosophical way to view the question is to ask whether the two patents (878,463 and 1,018,502) cover the same invention, when properly construed. *Thomson, etc.* v. *Elmira, etc., Co.*, 71 Fed. 396, 18 C. C. A. 145. They do not; one being only for a process of making, and the other for the thing made, with disclosure of another process.
>
> "It is to us plain that there was no double patenting; but what the point really suggests is that the long-settled practice of the Office, requiring division of applications thought to reveal more than a single invention, leads to logical difficulties far greater than could be found in a patent covering numerous inventive concepts, provided the claims were severally confined to one invention only."

Another test of double patenting was applied by the Court in

Standard Brands, Inc. v. *Federal Yeast Corporation*, 38 F. (2d) 329.

The Court said:

> "* * * This defense is available when the claims of the two patents are the same and when the inventor's first patent cannot be practiced without infringing the claims of the second, and the second patent

> cannot be practiced without infringing the claims of the first. * * *"

It is manifest that the invention covered by the claims which applicant is seeking for the protection of the article could be practiced without infringing the process claims in either of his patents 1798168 or 1851060 because the bag might be made by a different process than that covered by the claims of either patent.

That the grant of a process patent is no bar to the grant of a patent on the article is also held by this Court in

> *In re Burt, et al.*, 58 App. D. C. 7; 24 F. (2d) 273.

The invention related to a small cake of frozen ice cream on a stick. The applicant had already been allowed a claim on the process and was seeking a patent on the article. It is also to be noted that claim 1 included

> "a stick member partially embedded in the body portion and attached thereto by *congelation.*"

This necessarily suggested that the stick was attached to the ice cream by having the ice cream frozen around it and really included more of the process than does applicant's expression, "machine made from a bag tube." Nevertheless, the Court overruled the Patent Office rejection and allowed the article claims.

This decision is likewise illustrative of the difference in the attitude of the Patent Office and the Court in considering the scope of protection to which the inventor is entitled. The Patent

Office had rejected the applicant on the ground that there was no invention in applying a cake of ice cream to a stick in view of the fact that it had heretofore been customary to make what are known as "lollipops," produced by inserting a stick into warm, sticky candy, which hardens and holds the stick. The Court said:

> "As admitted by the Patent Office, applicant has produced a new article, which has found public favor, and his useful and 'happy thought' should be recognized. * * * It is quite easy, now that he has solved the problem, to reach the conclusion that it was very simple of solution; but the patent law contemplates rewarding the one who really solves it, and not the one who, after its solution, thinks he could have solved it."

In the present case there is no question but that the Poppe bag-envelope is new and is of great commercial value. It is equally true that the process claims of Poppe's prior patents do not secure to him the protection which would be secured by the claims which have been refused by the Patent Office, and since it is the intention of the Patent Law to give to the inventor the full protection commensurate with the advance which he has made in the art, it is only by the grant of an article patent that the protection contemplated by the Patent Law may be secured.

CONCLUSION.

In conclusion it is submitted that the Poppe bag-envelope, being a new and useful article of great commercial value not suggested by the prior art and not secured by prior patents on processes and machines by which the article may be produced, the decree of the Court below should be reversed and the Commissioner of Patents directed to issue a patent to the appellant.

Respectfully submitted,

GEORGE M. DOWE,
Graybar Building,
420 Lexington Avenue,
New York, N. Y.

Dated November 23, 1933.

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COURT OF APPEALS
DISTRICT OF COLUMBIA
FILED
JAN 1 [illegible]
Henry W. Hodges
CLERK

No. 6035

In the Court of Appeals of the District of Columbia

OCTOBER TERM, 1933

EQUITABLE PAPER BAG COMPANY, INC., APPELLANT
v.
CONWAY P. COE, COMMISSIONER OF PATENTS,
APPELLEE

APPEAL FROM THE SUPREME COURT OF THE DISTRICT OF COLUMBIA

BRIEF FOR THE COMMISSIONER OF PATENTS, APPELLEE

T. A. HOSTETLER,
Solicitor United States Patent Office.

In the Court of Appeals of the District of Columbia

October Term, 1933

No. 6035

Equitable Paper Bag Company, Inc., appellant
v.
Conway P. Coe, Commissioner of Patents,
appellee

APPEAL FROM THE SUPREME COURT OF THE DISTRICT OF COLUMBIA

BRIEF FOR THE COMMISSIONER OF PATENTS, APPELLEE

STATEMENT OF THE CASE

This is an appeal from a decree of the Supreme Court of the District of Columbia dismissing appellant's Bill of Complaint filed under Section 4915 R.S.

Appellant is seeking certain claims for an envelope that are defined by the process of making the envelope. Appellant has a patent No. 1,798,168 (R. 50) granted on a parent application, which contains claims for the apparatus and claims for the process, and appellant now seeks in the divisional application claims for the article defined by the process, as will be more fully explained.

THE GROUNDS OF REJECTION

All of the claims stand rejected (1) on the ground that they are unpatentable over the prior patents of record, and (2) claims 6 to 10, inclusive, and claim 15 stand rejected as not being proper article claims because defined by the process by which the article is made.

THE PRIOR ART

The patents to Sullivan (R. 84) and Haseltine (R. 75) were cited principally to show the tubular feature of Mr. Poppe's envelope. The pertinency of the patents is set forth to some extent in the Examiner's Statement (R. 41) and the decision of the Board of Appeals (R. 45).

The Vanderlip patent (R. 72), in Fig. 5, discloses a blank from which the envelope is formed. The front or face 3 has two flaps 2 on the edges. The flaps 2 form the back of the envelope. The free edges overlap each other and are pasted together. The flap 7 at the bottom is then bent over and pasted over the back. The upper flaps 4 that overlap then form a unitary flap for closing the top.

Vanderlip evidently regards the envelope *per se* as being old as he is not claiming that in his single claim. The novelty, according to the claim, is in the flexible metal strip 6 in the pocket 5, which serves to hold the flap in closed position after the flap and metal strip are bent over for that purpose.

The patent to Hogan (R. 81) also discloses a similar conventional blank, Fig. 1, in which the side portions 7 and 8 are folded over to form the back, after which the flap 6 is folded over to close the bottom, all as shown in Fig. 3. The two upper flaps 9 and 19 form a unitary closure for the top as shown in Fig. 2. The novelty claimed in this patent is not in the conventional form of the blank but in the closing means which comprises the tongue 11, fastener 13, and eyelet 14.

The patent to McCoy (R. 79) discloses a bag or envelope of the conventional type for which no novelty is claimed. His claim is for the crimped metal strip 3 which forms fastening means as illustrated in the various figures.

The patent to Driver (R. 77) discloses a bag comprising a tubular blank sealed at one end (see claims, R. 77).

At the trial the question of waste material was discussed quite fully. Mr. Poppe has made that matter clear in his testimony so there appears to be no disagreement on that point.

It is apparent that if a series of blanks, as shown in Fig. 5 of Vanderlip, be cut from a roll or strip of paper, the flap 7 would substantially fit into the cut-out portion between the flaps 4 of the preceding blank. In other words, each single cut across the strip of paper would form the top line of one envelope blank and the bottom line of the next succeeding blank, with no waste, provided only right angled cuts were made. If, however, it is desired to bevel the side edges of the flaps 7 and 4 (Figs. 1 and 3) the small triangular portions thus cut or clipped off would be wasted. The patent to McCoy and that to Driver, however, disclose rectangular flaps, that is, flaps with no oblique side or end edges. It should, however, be noted that the "waste" feature does not enter into the claims nor is it seen how it could in any way constitute a patentable matter in this case. It should be noted that the waste does not constitute a loss of the stock used as a roll of paper would make the same number of blanks irrespective of whether the triangular portions were clipped out or left in.

The top or closing flap of Vanderlip formed by the two flaps 4 is shown in Fig. 2 as inserted into the inside of the envelope. However, it is the practice in ordinary envelopes to so insert the flap when used unsealed, but when sealed the flap is universally sealed upon the outside of the envelope.

The Poppe envelope also does not have the pocket 5, or metal strip 6. It is well settled that it does not involve invention to omit an element and also its function.

As stated in Walker on Patents (Sixth Edition), Section 73:

> It is not invention to omit one or more of the parts of a machine or manufacture, un-

less that omission causes a new mode of operation of the parts retained.

Stow v. *Chicago*, 3 Bann. & Ard. 92, 1877, decided by Judge Blodgett, is the case which perhaps most exactly corresponds with this rule. The patent in that case covered a wood pavement like that of Nicholson, except that it omitted the board foundation and also the board strips of that earlier pavement. Judge Blodgett held that those omissions constituted no invention, saying: "A reconstruction of a machine, so that a less number of parts will perform all the functions of the greater, may be invention of a high order, but the omission of a part, with a corresponding omission of function, so that the retained parts do just what they did before in the combination, cannot be other than a mere matter of judgment, depending upon whether it is desirable to have the machine do all, or less, than it did before." These views were also reiterated and reinforced by the same judge many years after they were stated and applied by him in the leading case.

And the Supreme Court, when the latter case reached that tribunal, affirmed Judge Blodgett's decision and has since rendered several decisions to the same effect.

The exception which is stated in the general rule of this section was judicially applied, and is well illustrated, in a case decided by Judge Nathaniel Shipman, where invention was found to reside in so reorganizing a meat-mincing machine, as to dispense with some of its parts, and as to cause the parts retained to do the work of the original machine.

And the same exception is illustrated in a later case, in the Circuit Court of Appeals for the Second Circuit. And in a case which involved a process patent, the Supreme Court has decided that invention resided in omitting one of the steps in an old process, where the resulting new process was the result of careful and long-continued experiment, and where its utility was decidedly greater than that of the old process. And Judge Gilbert has held that it is invention to omit, from a prior process, a step which those skilled in its performance considered essential, but which the inventor proved to be useless. It is not invention, however, merely to make in one piece what was formerly made in two.

In support of paragraph 73 the Author cites the following additional authorities:

McClain v. *Ortmayer*, 141 U.S. 425, 1891.

Hat Pouncing Machine Co. v. *Hedden*, 148 U.S. 489, 1893.

Giles v. *Heysinger*, 150 U.S. 632, 1893.

Olin v. *Timken*, 155 U.S. 148, 1894.

CLAIMS DEFINED BY THE METHOD

Claims 6 to 10, and 15 purport to be for an article of manufacture—a bag envelope. But they define the article by the process of manufacture, in such language as: "Machine made from a bag tube" and "Machine cut side edges." The Examiner held that these claims were not proper in form as they defined the Article by the Method. This was given as an additional ground of rejection. (R. 41.) This action was affirmed by the Board of Appeals. (R. 45.) An article should be defined by its structure irrespective of the method by which it is made. The following decisions are cited in support of this statement, viz.:

In the case of *In re Brown*, 58 App.D.C. 285; 29 F. (2d) 873; 1929 C.D. 164, claims for a depolarizing mixture for electric batteries comprising the intimate mixture obtained by the joint milling of an oxide of carbon and conductive carbon, were denied on the ground that they improperly claimed a product by the process.

In *Fulton* v. *Bishop*, 17 F. (2d) 1006, the claims were held valid and infringed, the product not infringed. The Court said:

> The new product which Fulton devised was a very thin and flexible bellows made from a very thin walled metal tube, by known processes of working them for the first time adapted for and adapted to the peculiarities of the problem; but to describe the product in this way is to import the process into the claims of the product patent, and for technical — and perhaps substantial — reasons such method of description made need not usually be employed in a patent upon the article so produced.

There are however a number of cases in which such claims have been held valid because they could not be defined in any other way.

Plaintiff's application No. 435844 involved in this suit states that it is a division of his application No. 316462. That application has become patent No. 1798168, which is plaintiff's Exhibit No. 2 (page 2 of the Record).

This patent No. 1798168 has claims for the machine or apparatus and claims for the method of making the bag of the application. If the so-called article claims also comprise the method plaintiff would have two patents for the method.

As a case directly in point attention is called to *Oval Wood Dish Co.* v. *Sandy Creek N.Y. Wood Mfg. Co.*, 60 F.R. 285. The decision is clear and concise and well worth the time for reading. In that case Seth H. Smith was granted a patent No. 273773 with claims for the article (wood dish) defined by the method of making the dish. (See claims 1–4, page 286 of the decision.) Thereafter he was granted a patent No. 276198 with claims for the machine (page 287), and after that he was granted a patent No. 278828 with claims for the method (pages 287–288). In the infringement suit the patent for the article defined by the method was held valid (the first of the three patents to issue) but the method patent was held invalid. The Court in discussing the article and method patents (page 289) said:

> Two patents cannot issue for the same invention. This is rudimentary. Where two such patents issue to the same person the second patent is void. The case of *Miller*

v. *Eagle, etc., Co.*, 151 U.S. 186, 1894 C.D. 147, 66 O.G. 845, is the latest and the most pronounced case on this subject. By that decision the following propositions are established: A second patent cannot issue to the same party for an invention actually covered by an earlier patent, although the claims of the two patents may differ, the latter patent protecting certain features of the same invention not protected by the earlier patent. When a process and a product are so identical that the former creates the latter and only so, there are not two distinct and separable inventions. The subject matter of a second patent, in such circumstances, is so inseparably involved in the first as to render the second invalid.

The Court then quotes with approval from *Mosler Safe Co.* v. *Mosler*, 127 U.S. 354:

> After a patent is granted for an article described as made by causing it to pass through a certain method of operation to produce it, as in this case, cutting away the metal in a certain manner, and then bending what is left in a certain manner, the inventor cannot afterwards, on an independent application, secure a patent for the method or process of cutting away the metal and then bending it so as to produce the identical article covered by the previous patent, which article was described in that patent as produced by the method or process sought to be covered by taking out of the second patent.

In its résumé, page 290, the Court said:

> Turning now to the patents in suit it will be seen that the first, or dish, patent is generally for a concavo-convex dish cut or scooped from a block of wood by a revolving curved knife working alternately with a flat facing-off knife, as shown in the patent for the machine. The machine patent describes with great minuteness the details of the mechanism, its mode of operation, and the method of making a dish. The process patent, No. 278828, must, therefore, be declared invalid in view of the prior patents. As was said in *Plummer* v. *Sargent*, 120 U.S. 442, 7 Sup. Co. 640:
>
> "Although there are two patents, one for a process and the other for a product, there is in fact but one invention."

It is submitted that this decision is controlling in the instant case.

The case of *Mosler Safe Co.* v. *Mosler*, 127 U.S. 354–361, involved a patent having a claim for a process, and another patent having claims for an article produced by a described method or process. The Court held the later patent invalid on the ground that the two patents cover but one invention. In ruling on this point the Court said:

> It is apparent that the claim for the process, in No. 283136 is merely for the process or method of cutting away and removing the metal, so as to permit of the bending, and of doing the bending, and of producing the close joint as the bending takes place, such

> process or method being merely the process or method involved in making the article covered by claims 1 and 2 of No. 281640. In other words, claims 1 and 2 of No. 281640 are each for an article produced by a described method or process, and the claim of No. 283136 is for such method or process of producing such article. The method is a purely mechanical method. * * * There was no patentable invention in No. 283136, when it was applied for, in view of what was applied for by claims 1 and 2 of No. 281640. After a patent is granted for an article described as made by causing it to pass through a certain method of operation to produce it, as, in this case, cutting away the metal in a certain manner and then bending what is left in a certain manner, the inventor cannot afterwards, on an independent application, secure a patent for the method or process of cutting away the metal and then bending it so as to produce the identical article covered by the previous patent, which article was described in that patent as produced by the method or process sought to be covered by taking out the second patent.

Appellant's patent No. 1798168 (R. 55), which was application Serial No. 316462 and is so identified in the Examiner's Statement (R. 41, 43) contains claims for a method of making bags and claims for the apparatus. The bags are made from a continuous strip or tube.

It is apparent from the cited art, particularly Vanderlip and Hogan, that there is no patentable novelty in appellant's bag *per se* which comprises the conventional form or pattern as recited in appellant's claims. Appellant however seeks to distinguish from the conventional bag by incorporating in the claims process limitations, such as machine made from a bag tube. The bag being old, the novelty is in the method, and the method being relied upon to support the claims, the claims must be regarded in effect as claims for that method. Inasmuch as appellant already has claims for the method the allowance of the present claims embracing method steps would constitute double patenting.

CONCLUSION

It is submitted in conclusion:

That the claims do not define anything patentable over the art of record.

That the granting of the claims for which appellant contends would be an extension of the monopoly conferred by the Poppe patents.

That the rulings of the Trial Court are correct and should be affirmed.

Respectfully submitted.

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Attorney for Appellee.

JANUARY 2, 1934.

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